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BASIC SKILLS RESOURCE CENTER:

The Effects of Learning Strategies
Training on the Development of
Skills in English as a Second
Language

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Dr. Richard P. Kern was the contracting officer and technical monitor for this project. The report represents a portion of one of five research projects conducted as part of the research component of the Basic Skills Resource Center contract.

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This project was designed as part of the Basic Skills Resource Center component to identify effects of training in the use of learning strategies on the development of English-as-a-Second-Language skills. High school students from mixed foreign language backgrounds were randomly assigned to one of two strategy treatment groups, or to a control group. Training in a natural teaching environment was presented for one hour daily over an eight day period in three language tasks: vocabulary, listening, and speaking. Results of the training are thoroughly discussed, as are implications for classroom instruction and future research.

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EXECUTIVE SUMMARY

The Effects of Learning Strategies Training on the
Development of Skills in English as a Second Language

InterAmerica Research Associates has been contracted by the U.S. Army Research Institute (ARI) to develop and operate the Basic Skills Resource Center (BSRC). The BSRC project has two interfacing components: the design, implementation, and operation of an information service; and the implementation and monitoring of applied research in the area of adult basic skills and continuing education. This report describes one of five research studies undertaken through the BSRC research component.

This study was designed to identify the effects of strategy training on the development of three types of language skills in English as a second language: vocabulary learning, listening comprehension, and oral production. The subjects were 75 high school students from Hispanic, Asian, and mixed foreign language backgrounds who were randomly assigned proportionate to ethnicity and sex to one of three groups: a metacognitive treatment group, a cognitive treatment group, or a control group. The metacognitive group received training in the use of one metacognitive strategy and up to two cognitive strategies depending on the language learning task. The cognitive group received training only on cognitive strategies, but no metacognitive strategies, and the control group received instruction to work on tasks employing their ordinary procedures. Training was presented in a natural teaching environment for one hour daily over 8 days. In addition, pretesting and posttesting each took one day.

Analyses were undertaken to (a) compare the treatment groups on posttest measures of vocabulary, listening and speaking; (b) study ethnic group differences for the treatment conditions; (c) determine if training was more effective for learners with lower pretest scores; and (d) determine if students trained on specific strategies actually used them in performing the language tasks relative to the controls. Throughout these analyses it was predicted that the order of effects on the outcome variables would be the metacognitive over the cognitive, and the cognitive over the controls. Results indicated that strategy training had (a) no effects on vocabulary learning overall, although effects in the predicted direction were evident for Hispanics; (b) significant effects for listening skills, depending on the task difficulty or strength of strategy training cues; and (c) significant effects for speaking tasks as predicted.

Teachers interested in helping students to become more effective learners should be aware of strategies which can be embedded in curricula and taught to students with only modest extra effort. Teachers can expand their instructional role to include a variety of learning strategies which can be used with specific types of language tasks. Future research should be directed to refining strategy training approaches, and determining procedures for strengthing the impact of the strategies on student outcomes.

THE EFFECTS OF LEARNING STRATEGIES TRAINING ON THE

DEVELOPMENT OF SKILLS IN ENGLISH AS A SECOND LANGUAGE

I. INTRODUCTION

The Study of Learning Strategies for Developing Skills in English as a
Second Language was designed to identify approaches that students can use
to improve language learning and retention.   The study was conducted by
InterAmerica Research Associates for the Army Research Institute for the
Behavioral and Social Sciences under Contract No. MDA-903-82-C-0169 for
development and operation of a Basic Skills Resource Center (BSRC).   The
BSRC consists of two components: (a) an information database and
communications network on Army basic skills education, referred to as the
Military Educators Resource NETWORK; and (b) a research component on
learning strategies in basic skills education.   The Study of Learning
Strategies in English as a Second Language (ESL) was one of five studies
performed within the research component of the BSRC.

This report is the fourth of a series of reports for the study of learning
strategies.   The first report identified and analyzed related studies on
the topic and was entitled "A Review of the Literature on Learning
Strategies in the Acquisition of English as a Second Language: The
Potential for Research Applications."   The second report described Phase 1
of the ESL study, in which information was collected through interviews and
observations on the varieties of learning strategies used by students in
secondary school ESL classes.   The third report was "A Teachers' Guide to
Learning Strategies for Acquiring Skills in Speaking and Understanding
English as a Second Language."   The Teachers' Guide was designed as a
reference document for teachers interested in imparting learning strategies

to ESL students. The present report, which is the final report on data collection in high schools, describes Phase 2 of the ESL study, in which selected learning strategies were used in an experiment to identify the effects of learning strategies for different language learning tasks. Two later reports will describe a Phase 1 and piloted Phase 2 study on a military base.

Background

Research and theory in second language learning strongly suggest that good language learners use a variety of strategies to assist them in gaining command over new language skills. By implication, less competent learners should be able to improve their skills in a second language if they could be trained to use strategies evidenced among more successful language learners. With successful training, less competent learners should be able to apply strategies to a variety of different language skills and extend the strategies to new tasks of the same type on which they received training. Teachers could play an important role by conveying strategy applications to students and thereby support their efforts to learn the new language.

This study concerns foreign language background students trained to use learning strategies on three critical academic language tasks in English: vocabulary learning, listening to a lecture, and making a brief oral presentation to other students. These three language tasks were selected to assure that the range of skills presented in the strategy training was representative of tasks found in a high school second language curriculum. The study used natural classroom instruction so that the instructional procedures could be generally applied by most teachers. Nevertheless, the

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instructional approach was tightly controlled, and entailed minute-by-minute planning of each language learning activity for the purposes of the study. Furthermore, an experimental procedure with random assignment of students to receive one of two treatment conditions or a control condition was used to assure that the results of the study could be interpreted unambiguously.

Review of Literature

The design of learning strategies training in second language learning draws upon two types of background research. The first is within the second language learning literature and stems from work on the "good language learner" by Rubin (1975) and by the Ontario Institute for Studies in Education (Naiman, Frohlich, Stern, & Todesco, 1978). These pioneering efforts first pointed to the kinds of strategies that could be used in language learning and described implications for classroom practice. More recent work by O'Malley, Russo, Chamot, Stewner-Manzanares, and Kupper (in press) builds on this earlier background and adds specific new information about classifications of learning strategies that are generally applicable across a variety of language tasks, and strategies that are associated with specific language learning activities.

The second type of literature on which the design of learning strategies training studies can draw is the considerable body of research amassed over the past 15 years in cognitive psychology (e.g., Dansereau, in press; Weinstein, 1978). This extensive volume of literature, much of which involves experimental analyses of the impact of learning strategies training, points to the utility of learning strategies primarily in first

language reading for native English speakers and suggests a number of specific strategies that are adaptable for use in second language learning. The literature also identifies some specific types of strategies that should always be included in any strategy training effort. For example, although cognitive strategies serve as the core for most strategy training, present evidence suggests that a combined metacognitive/cognitive training approach is superior in producing transfer of strategies to new tasks (Brown & Palincsar, 1982). The reason is that students with metacognitive training have an opportunity to reflect on the process of learning, the application of learning strategies, and the language items with which strategy applications were successful.

Both sources of research reveal that the second language learning activities on which strategy training has been analyzed tend to be limited to vocabulary tasks. The typical approach in these studies has been either to encourage students to develop their own associations linking a vocabulary word with its equivalent in the second language (Cohen & Aphek, 1980; 1981), or to train students to use specific types of linking associations that will cue the target word (e.g., Atkinson & Raugh, 1975; Levin, in press; Pressley, Levin, Nakamura, Hope, Bisbo, & Toye, 1980). Both approaches require one-to-one links between the words and their translation via an associative connection. In almost all cases, the training has been conducted individually rather than in groups. With the exception of one set of studies where instruction was on vocabulary in context (Cohen & Aphek, 1980; 1981), this body of work has assumed that vocabulary learning often can and does take place effectively out of the context provided by meaningful sentences or narratives. Ignoring the potential advantages of contextualization runs counter to the experience

of many teachers and curriculum designers despite mixed evidence for its effectiveness (e.g., Pressley, Levin, Kuiper, Bryant, & Michener, 1981). The studies nevertheless indicate that associations established through imagery to link translated equivalents of vocabulary words either in or out of context will dramatically facilitate student learning.

Despite the effectiveness shown for one-to-one associations in vocabulary learning, the associations are inefficient to a degree because students must create a special new connecting image for every vocabulary word learned. For example, associating the Spanish word "carta" to its translated equivalent, "letter," requires some unique mental gymnastics before the linking image is developed. One example given in the literature is to think of an English homophone for "carta," such as "cart," and to imagine a letter, the translated equivalent, positioned in a shopping cart like some bag of groceries. This image and others like it, once established, are virtually indelible in memory. Yet the mental association developed for "carta" simply has no relevance for other words on most vocabulary lists, which require new associations of equally complicated dimensions.

One possible solution to this complexity is to group the words to be learned so that fewer linkages need to be established. If the student sees possible ways to group words based on semantic meaning or other characteristics, it is possible that the linking association established for one word could be extended to other words in the group. Considerable evidence indicates that grouped objects in one's native language are easier to remember than lists of objects individually (Weinstein, 1978). Grouping not only makes the objects easier to remember, but possibly the second

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language labels as well, through the contextualizing that takes place. For example, words that go together in a grocery store could have sufficient contextual identity to cue the English equivalent word. Personal experience reported by one expert multiple language learner indicates that learning groups of words in context is an efficient and effective procedure for extending familiarity with both words and phrases (Stewner-Manzanares, personal communication, 1983). Because these types of associations often are idiosyncratic to individual students, as are the groupings, students trained to use this approach would probably best be left to their own devices once provided with instruction on the use of grouping and imagery as a combined and possibly more efficient strategy.

Even more effective vocabulary learning might result if students were encouraged to use a metacognitive strategy and evaluate their successes and shortcomings in applying these strategies by recording their experiences in a daily journal. Journal entries would give the student an opportunity to identify words that were learned or not learned and to analyze the strategies which served to enhance learning. Further, as has been suggested in the cognitive literature, transfer of strategy training to new tasks would be more likely if cognitive and metacognitive strategy training were paired (Brown & Palincsar, 1982).

As was noted above, studies designed to explore the effectiveness of learning strategy training with second languages have been limited exclusively to vocabulary tasks. Although some studies of first language listening skills have been conducted with learning strategies (Dansereau, Atkinson, Long, & McDonald, 1974), studies with second languages have yet to explore the effectiveness of strate : training with listening skills.

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More importantly, strategy training has neglected oral production skills altogether.

For a variety of reasons, it is extremely important for studies of learning strategy training with second languages to address a fuller range of tasks than is represented by vocabulary alone. One reason is that only a small portion of language learning is devoted to vocabulary, and especially to vocabulary learning in isolation, at least in most academic settings. In academic settings, students often listen to discussions or lectures in the second language, and they are (or should be) required to speak, convey information, and express and substantiate their opinions with regard to academic content. A second reason for addressing the fuller range of language tasks in academic settings is that the effectiveness of classroom instruction for promoting language "acquisition," or the type of language required for effective communication, has been seriously questioned by more than one major second language theorist (Bialystok, 1979, 1983; Krashen, 1983). To the extent that strategy training can be shown to have an effect on more complicated language tasks, apart from vocabulary and grammar, for example, the contention that the role of classroom instruction in language acquisition is limited can be questioned.

Listening skills in first languages have proven responsive to strategy training and there would be every reason to believe them to be equally responsive to strategy training in second languages. One cognitive strategy that has proven effective with first language listening skills is note-taking (Dansereau et al., 1974; Di Vesta & Gray, 1982; Wieland & Kingsbury, 1979). Differences on outcome measures with note-taking may be found depending on whether the information presented is written or oral,

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whether or not students have reviewed their notes, and whether or not
students were instructed in note-taking strategies. In teaching English as
a second language, instruction on specific note-taking skills has rarely
been discussed in the literature, with some recent notable exceptions
(Dunkel & Pialorsi, 1982; Hamp-Lyons, 1983; Yorkey, Barrutia, Chamot et
al., 1984), and has not been the subject of specific experimental studies.

One way to enhance note-taking skills with a metacognitive strategy would
be to provide students with ideas on specific types of information to
listen for in a lecture, i.e., to use selective attention for specific
linguistic items. Although in a history lecture one can focus on names and
dates, this may not work for a lecture on psychology or sciences. Focusing
attention selectively on linguistic markers that tend to occur irrespective
of the lecture content should give the student a way to determine the types
of information on which to take notes. Specific examples of markers used
for emphasis in a lecture or that reflect the organization of the lecture
are appropriate for this purpose. Examples are the markers "first," "the
most important point is...," and "in conclusion." Students with
information about markers on which to focus their attention should have
identified a mechanism that will direct their note-taking toward specific
main points and details that must be retained for successful comprehension
of the listening task. It is possible that note-taking skills can be
enhanced even further by using cooperation, a strategy enabling students to
engage in interactions to identify omissions of importance or errors in
recall or interpretation (Slavin, 1983).

Strategies to assist second language students in learning how to speak more
effectively in an academic setting should be effective if the strategies
provide a way to analyze essential purposes or functions in the

communication, and generate appropriate language to accomplish those functions (Stevick, 1984). This is similar in some respects to having an advance organizer (Ausubel, 1960; 1978) or a schema (Dansereau, in press) in that a set of basic superordinate principles is available to serve as an organizing framework for new information. However, whereas advance organizers are usually applied to reading, where the student uses a receptive process to gather new information to associate with the superordinate principles, here the organizers are applied to oral production, where the student produces sentences that correspond to the functions or organizing principles inherent in the communication. But first the students must examine their capability to produce those sentences, and identify specific language elements needed beyond those presently available in their language repertoire. After retrieving the needed language elements, students should be able to accomplish all the functions required in a language task. The main additional requirement would be an opportunity to rehearse the language in a cooperative setting, using the superordinate principles to organize the communication, and appropriate markers to signal the shift from one organizing function to the next or to highlight other information.

Purposes

This study was designed to test the effectiveness of strategy training with students of English as a second language (ESL) on three types of academic language tasks: vocabulary learning, listening comprehension, and oral production. The strategies were specifically designed to produce increased learning for the language tasks selected in training, and to maximize the likelihood of transfer to a new task of the same type.

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II. METHODOLOGY

SUBJECTS

The subjects were 75 high school students enrolled in ESL classes during the Fall 1983 semester. The students were located in three high schools in an Eastern metropolitan area in the United States. Two of the schools were in a single school district and had common entry assessment and curriculum approaches, while one school was in another district with somewhat different assessment and instructional approaches. However, both districts identified students as beginning, intermediate, or advanced level for English proficiency placement. The students used in this study were all intermediate level, were of both sexes, and were predominantly from Spanish language countries or from Southeast Asian countries, with a few students from other countries in Europe or Asia. Intermediate level proficiency was defined in both school districts as students with limited proficiency in understanding and speaking English, and little or no skill in reading and writing English.

INSTRUMENTS

Four data collection instruments were used in the study: curriculum specific tests in vocabulary, listening comprehension, and speaking, and a questionnaire for learning strategy uses. The first three instruments were administered at both pretest and posttest, while the questionnaire for learning strategies was administered only at posttest. Only the speaking test was individually administered; all others were group administered. Each of these tests is described in the following sections.

The <u>vocabulary pre- and posttest</u> were constructed to be similar in format; both were a 32-item test with 10 picture recognition items, 10 word recognition items, 6 picture recall items, and 6 word recall items. The vocabulary pretest, along with the examiner's directions and answer key, is presented in Appendix A. The posttest, with its corresponding examiner's directions and answer key, is presented in Appendix B.

All words used in training and in the posttest were selected from a 200-word list that had been pilot tested on a separate group of intermediate level ESL students. The pilot test group was given a list of words and asked to indicate if the words were familiar or unfamiliar. Words retained for use in the training were familiar to fewer than 40 percent of this group. The words had been selected originally from vocabulary lists found in intermediate level ESL work books. After the vocabulary words had been selected for the training and the 32-posttest items determined, the vocabulary pretest was developed. Pretest items were semantically matched to designated posttest items. For example, a word to be presented in the training and posttest, such as <u>fangs</u>, was matched semantically in the pretest to a word such as <u>claws</u>. A high imagery training and posttest word, such as <u>mixer</u>, was matched in the pretest to <u>blender</u>, and both were presented with a slide. While the words used in both the training and the posttest had been piloted on a separate group and selected because of the group's lack of familiarity with them, the same was not true for the pretest. However, the pretest words were selected (a) to match semantically with the posttest items, and (b) to discriminate between students who had an extensive vocabulary in English and those who did not. As an example of this latter purpose, words such as <u>rose</u> and <u>snake</u> (likely to be known to some intermediate level students) were included in the

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pretest, along with items such as strut and rake, judged less likely to be familiar. This provided data on the range of student vocabulary in English at the beginning of training.

For both pre- and posttests, the picture recognition items were multiple choice and involved slide presentation of four pictures simultaneously, one of which--the target word--was verbally announced by the examiner. Each of the four pictures was labeled with a capital letter (A, B, C, or D). Only these letters appeared on the student answer sheet, not the name of any of the objects depicted. Students marked their papers by circling the letter corresponding to the picture they believed represented the target word. On the posttest, each of the options represented a word that had been presented pictorially during training. In the word recognition items, the examiner verbally presented a definition and read the four possible response words aloud; only the word alternatives were presented on the student's answer sheet. The students marked their paper to indicate which of the four words represented the definition. In the recall test, students were required to write down from memory the word corresponding to the slide presented (picture recall) or to the definition verbalized by the examiner (definition recall). Errors in spelling were not counted as a wrong answer. Each student received a score for overall correct number of items, and a subscore for each subset of items. Roughly half the words on the posttest had been presented during training in the same week as the posttest (the recent list), and half had been presented in the prior week (the delayed list). The 16 words posttested with a slide had been presented during training with a slide; likewise, the 16 words posttested with a definition had originally been trained using a definition.

Both the listening comprehension pretest and posttest consisted of 10 four-choice questions and 3 two-choice questions on a 5-minute listening task presented immediately prior to the test. The four-choice items were in a standard multiple choice format, and the two-choice items called upon the students to mark whether a statement about the passage represented a main idea or a detail. The listening tasks presented to the students prior to the pretest and posttest were designed to be structurally similar; both tasks consisted of a videotaped 5-minute lecture on a historical/ geographical topic. The test items on both tests were designed to assess different levels of Bloom's taxonomy of the cognitive domain, viz., knowledge, comprehension, and analysis. Both tests were group administered. They are exhibited in Appendix C.

For the speaking pretest, students were asked to prepare a brief (2-minute) talk on one of three topics: a personal experience (My first day in school, What I do on my job), culture (What a tourist should see in my country, Holidays, Traditions), or an academic subject (A school project, Favorite author, etc.). After deciding on the topic, students were permitted to organize and plan their presentation overnight. The following day, which was the first day of training, students were divided into small groups and, one by one, they recorded their presentation. This tape represented their speaking pretest. For the speaking posttest, students were again asked to prepare a brief talk on one of many possible topics parallel in focus to the pretest topics. (See Appendix D for the list of topics used in the pretest and posttest.) Preparation for the posttest differed from the pretest only in that students developed their talks during class time. This ensured that all three treatment groups spent equal time preparing for posttest. Each student practiced in a small group of 3-4 students in class.

and then made the presentation individually to one of the examiners and the same small group. The presentation was tape recorded for later scoring. The speaking test was rated on four factors appropriate to oral presentations: delivery, appropriateness, accuracy, and organization (see Appendix E for Factor Definitions). Performance standards for each factor were modifications of those used by the Foreign Service Institute Test for Oral Proficiency which gives performance standards for oral interactions. The performance standards for this test were: blocking, intrusive, acceptable, and successful (see Appendix F for definitions and examples of the performance standards applied to each of the factors).

Ratings by five independent judges knowledgeable about ESL instruction were averaged to produce a single score. Judges were uninformed about the details of the treatment conditions but were trained in a two-hour session to use the rating system and then checked for accuracy against a standard. The rating system consisted of five levels defined by overall performance. Descriptions of each level are found in Appendix G. Levels of performance were established by having one of the authors listen to all tapes and assign a global rating. Low, mid, and high levels were determined first and called levels 1, 2, and 3. Levels which were similar to mid and low, but higher in one or two factors, were considered to be between levels and were called 1+ and 2+. The tests were then analyzed for performance on each factor and descriptions of levels were established. Descriptions were not intended to be absolute as different factors are weighed differently at different levels and in different linguistic environments. They were intended merely to be general guidelines for the judges when they were in doubt about a rating. Judges were instructed, first, to assign a global rating relative to a standard that had been established in training.

Second, they were to listen to the test again and determine a performance level for each factor (see Appendix H for Rating Sheet). If the global score did not agree with the summation of the factor ratings, the score was to be adjusted (see Appendix I for Instructions to Raters). The raters were to make notes on their reasons for assigning a particular score. In fact, judges found it easy to determine global scores and had an interjudge agreement of 85 percent. At no time were the judges told the details of the strategy training or how students were instructed to organize their presentations. The assigned ratings were global judgements of tests that were rated against each other for oral performance.

The Learning Strategies Inventory (Appendix J) was a 42-item questionnaire designed to detect uses of 14 learning strategies with specific language learning tasks. Five of the learning strategies were metacognitive, eight were cognitive and one was a social mediating strategy. The instrument presented statements describing a learning strategy use with one of the specific language learning tasks, and asked the student to respond by indicating whether the statement was "never true about me," "sometimes true about me," "usually true about me," or "always true about me." The language learning tasks were one of the three tasks used during the training sessions: vocabulary, listening comprehension, or speaking. Half the strategies on the instrument had been used in training, and half were not used in training. A list of these strategies and their definitions is included with the LSI in Appendix J, accompanied by a key to interpretation of the instrument.

OVERVIEW OF TREATMENT

Students were randomly assigned within each school to one of three groups: a metacognitive group, a cognitive group, or a control group. The size of an instructional group within each school was 8-10 students on the average. The metacognitive group received training in the use of one metacognitive strategy, up to two cognitive strategies, and one social mediating strategy, depending on the language learning task. The cognitive group received training only on the cognitive and social mediating strategies, but no metacognitive strategy training, and the control group received instruction to work on the language learning tasks using whatever procedure they ordinarily would employ. In each of the three schools participating in the study, the three project staff were responsible for implementing a different treatment condition in its entirety. By the conclusion of training in all three schools, each staff member had taught each treatment condition once, thereby nullifying teacher effects.

An overview of the treatment conditions is presented in Table 1, which shows the specific strategies that accompanied each language learning activity and each treatment. For example, the metacognitive group is seen to have both metacognitive, cognitive, and social mediating strategies presented. For the vocabulary task, the metacognitive strategy is self-evaluation, and the cognitive strategies are grouping and imagery. With the listening task, the metacognitive strategy is selective attention, and the cognitive strategy is note-taking, and the social mediating strategy is cooperation, and so on. The control group had no strategy instruction at all but was instructed to work on the language learning tasks using whatever strategies they usually employed.

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TABLE 1

Language Learning Activities and Learning Strategies
Presented for Each Treatment Condition

Treatment Condition	Strategy Type	Language Learning Activities		
		Vocabulary	Listening	Speaking
Metacognitive	Metacognitive Cognitive	Self-evaluation Grouping Imagery	Selective attention Note-taking Cooperation*	Functional planning Cooperation*
Cognitive	Cognitive only	Grouping Imagery	Note-taking Cooperation*	Cooperation*
Control	Activity only with no strategy training	——	——	——

*Cooperation is considered to be a social mediating strategy in which students can work either on cognitive or metacognitive components of the task. For these particular tasks, students were directed to work on cognitive aspects of learning.

Students were instructed in the use of learning strategies 50 minutes daily for 8 days in roughly a two week period. Table 2 displays the schedule of classroom activities across the 10-day period. On any single day, students typically received two of the following three language learning activities: vocabulary, listening, or speaking. For the treatment groups, the same learning strategies were always repeated with each language activity, although new content was presented each time a language activity recurred. Students therefore could practice strategy applications with new materials. Explicit directions and cues for using the strategies were faded on successive days of treatment for each activity, until at the posttest only a reminder was given to use the same strategies they had rehearsed before. Pretesting and posttesting consumed the full first and last days out of the 10 day period, leaving 8 full days at 50 minutes per day for instruction and interim performance testings, which on the average used about 30 percent of the total time for instruction. The following description provides an overview of each language learning task, followed by a detailed description of the treatment conditions for each activity. All instructional procedures described were pilot tested on a separate group of intermediate level English as a second language students in a different school from those used in treatment.

VOCABULARY INSTRUCTION

Ceneral Procedures

The vocabulary words used in the training were selected to represent a range of concreteness and imagery values. An example of a high imagery word is <u>web</u>; this was presented pictor...lly in training with

TABLE 2

Schedule of Activities

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Orientation 5	Listening Instruction 20	Speaking Instruction 15	Vocabulary Instruction 15	List. Review Lecture II 5	Finish Speaking Preparation 10	Vocabulary Presentation 6	Vocabulary Presentation 6	Lecture IV 5	Orientation 5
Vocabulary Pretest 15	Lecture I 5	Prepare Topic 15	Vocabulary Presentation 10	Study COOP 5	Practice COOP 10	Vocab Study 4	Vocab Study 4	Study COOP 5	Listening POSTTEST 15
	Cooperation Study 8		Vocab Study 4	Lecture II Repeat 5	Record Presentation 10	Vocab Test 5	Vocab Test 5	Lecture Repeat 5	
Listening Pretest 15	Lecture Repeat 5	Practice Cooperation 15	Vocab Test 5	Listening Test 6	Vocabulary Presentation 6	Journals 3	Journals 3	Listening Test 6	Vocabulary POSTTEST 15
	Listening Test 6		Journals 3	Speaking Review 10	Vocab Study 4	Lecture III 5	Finish Speaking Preparation 7	Prepare Speaking Topic for POSTTEST 15	
Speaking Pretest 15			Listening Review 8	Prepare Topic 11	Vocab Test 5	Study COOP 5	Practice COOP 10	Practice COOP 10	Speaking POSTTEST 15
					Journals 3	Listening Test 6	Record Presentation 10		
						Prepare Speaking Topic 8			
TOTAL: 50	TOTAL: 44	TOTAL: 45	TOTAL: 45	TOTAL: 42	TOTAL: 48	TOTAL: 42	TOTAL: 45	TOTAL: 46	TOTAL: 50

a slide showing a spider's web. Conversely, a low imagery word, such as
quarrel, was presented to the students verbally by way of definition.
Only words representing objects that could be photographed with little
chance for misinterpretation were presented pictorially. For example,
while the word fangs represents a concrete object, a photograph of a fang
could easily be interpreted by the student as "tooth" or "incisor." Thus,
if a slide could not communicate the precise meaning of the word in
question, the word was not presented pictorially. This resulted in
unavoidable overlap between presented method (pictorial, definition) and
imagery value, so that some of the words presented with definitions had
high imagery ratings.

Of the 70 training words, 42 were presented using slides. The remaining 28
words were presented by way of a definition. A list of these words, their
definitions and the manner in which they were presented in training is
presented in Appendix K. As noted earlier, all words were posttested in
the same manner that they were presented during training. (For a
description of how the words were selected for inclusion in the training,
refer to the previous discussion related to vocabulary testing which
appears under the Instruments section.)

The vocabulary words were presented in two cycles of two successive days
each for a total of four days during the 8 days of instruction. The two
cycles were essentially identical in presentation except for content. On
each of the four days, the presentation of the vocabulary lasted about 6
minutes. Four minutes were then allocated for study time. Thus, the
practice time for learning strategies with vocabulary items on any one day
was about 10 minutes, for a total of 40 minutes throughout the training. A

short test followed each practice session. For the pretest, there was no prior training on the vocabulary words, whereas the 32 words appearing on the posttest had all been presented to the students as part of the training described below.

On Day 1 of Cycle 1, students were asked to learn 20 new words. The words were presented under controlled circumstances by limiting both the duration and type of exposure. The type of exposure as mentioned above, was either pictorial, in which words such as dove and worm, were presented using a slide projector as they were pronounced, or verbal, where words such as widow, downpour or leak were defined orally by the teacher after being pronounced. Definitions of the verbally presented words were brief and used vocabulary that was familiar to the students. The verbally presented words varied in content but included nouns, adjectives, and verbs. After the vocabulary presentation was completed, all groups were given an opportunity to study what they had learned. All students, regardless of treatment group, were given equal exposure and study time and were tested immediately following the study period. On Day 2, students were asked to learn 15 new words, plus the 5 most commonly missed words repeated from the previous day's presentation. None of these words was repeated into the next vocabulary presentation in Cycle 2.

Cycle 2 was identical in presentation, with 20 new words to be learned on the first day, and 15 new words plus 5 repeated words to be learned on the subsequent day. Thus, a total of 70 new words were presented during the study, 32 of which appeared on the posttest. Posttest words were evenly divided between Cycle 1 (delayed posttest), and Cycle 2 (recent posttest) words, and between pictorial and verbal words within each cycle.

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Vocabulary Treatment Conditions

Metacognitive Group. Before the introduction of the first list of
vocabulary words, the metacognitive group received instruction on the use
of one metacognitive strategy and two cognitive strategies in learning
vocabulary. The metacognitive strategy was self-evaluation, and the
cognitive strategies were grouping and imagery. For the grouping strategy,
students were taught that a long list of words often can be separated into
parts that share semantic or other features. Words used in the vocabulary
lists had been preselected for obvious grouping on semantic (meaning)
similarity. For example, items that can be used in a kitchen, such as a
skillet, a kettle, and a mug would be included in a single list. Students
were instructed to scan through the list and group the words that to them
had common features. For the imagery strategy, students were instructed to
close their eyes and vividly create a mental image that incorporated all of
the key words they had grouped together. For example, a student might
imagine placing each of the objects on the "kitchen" group together in a
kitchen, making certain to couple each object with its corresponding label.
Recall was to be facilitated by the student reentering the scene and
extracting the required word. (The teacher's script for strategy
instruction in grouping and imagery is provided in Appendix L.)

The metacognitive strategy, self-evaluation, was implemented by giving
students journals in which to record the number of words they had learned
that day, the words they found to be difficult, and the method they used to
remember the words. The self-evaluation process was introduced after use
of the other strategies and testing of vocabulary knowledge. (The

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teacher's script for strategy instruction in self-evaluation is provided in Appendix M.)

Cognitive Group. Students assigned to the cognitive group received instruction in grouping and imagery that was identical to that given the metacognitive group (see Appendix L for the teacher's script.) What differentiated this group's approach to vocabulary learning was the absence of the metacognitive self-evaluation. These students were tested immediately after their study period.

Control Group. The control group received no strategy instruction but instead were told to learn the words in whatever way they normally did. The time spent on strategy instruction in the other groups was used in the control group to collect information about how students studied the vocabulary words. (The teacher's script for introducing vocabulary to the control group, as well as the questions to which they responded, are included in Appendix N.) The time they were given to study the words equaled the time the other groups spent in grouping and imagizing. The control group was also tested immediately after their study period.

Implementation of Strategy Training for Vocabulary

The vocabulary instruction was difficult to implement in both the metacognitive and cognitive groups and required extensive revision throughout the training. This difficulty resulted mainly from the need to keep the time on task equal across all three treatment conditions. The time restrictions impacted on the grouping strategy but also had

implications for the imaging and self-evaluation strategies. A discussion
of each strategy in turn will illustrate these problems.

For the grouping strategy, the instructor gave students in the
metacognitive and cognitive groups worksheets with several boxes drawn upon
them. These boxes had been pre-labeled with titles such as OBJECTS FOUND
IN A KITCHEN or WEATHER. Each student also received a small booklet made
from 20 slips of paper, each containing one vocabulary word and its
definition. When the word was presented to the class, the students were
instructed to tear its corresponding strip of paper from the booklet and
glue it into the one box they felt represented an appropriate
categorization (or grouping) for the word. For example, the word lapel
could be placed in the box labeled CLOTHING, along with other words such as
kerchief and cuff.

As originally planned, 6 minutes would be devoted in all treatment groups
to presenting the vocabulary, followed by 4 minutes of study time.
Instructors soon found that students in the metacognitive and cognitive
groups spent the entire presentation and study time fumbling with the
materials and deciding how they wanted to group the vocabulary words. They
were devoting no time at all to using the imagery strategy. In many cases,
students lagged several words behind the instructor. Meanwhile, students
in the control group pored over a simple list of words and definitions
without distraction.

To remedy this problem, the instructors modified the general approach so
that students in the metacognitive and cognitive groups received the list

of words already divided into groups sharing a common feature. A typical vocabulary worksheet is displayed on the following page. Thus, the grouping strategy was already performed for them. To mitigate the loss of this key action on their part, the students were asked to examine the word groupings and create a title for each set of words. This, it was felt, would establish the crucial semantic linkage between the words and accomplish the intended goal of the grouping strategy.

While using predetermined but unlabeled groupings lessened the time students required to prepare for using of the learning strategies, instructors were concerned about the short time left for actual study of the words. Students seemed to be falling back upon the use of the highly efficient rote strategies so in evidence in the control group, and did not appear to be using the grouping and imagery strategies at all. To provide more structure to the application of the learning strategies, instructors made one further modification to the general approach used in the metacognitive and cognitive groups. The 6 minutes of presentation and 4 minutes of study time were combined into a 10-minute block in which each group of words was presented, titled, and imagized before moving on to the next group. In this way, students were forced to concentrate on one vocabulary grouping at a time, with the instructor leading the class from one box of words to another at a supervised pace. The pace depended on the number of words in the group. For example, a box with four words received the following allocation of time: 48 seconds for presentation of all words in the box, either by slides or by definitions, 24 seconds for creating a title for the group, and 48 seconds for creating an image that incorporated all the words in the group.

TITLE: _____

SKILLET
A skillet is used for frying food.

KETTLE
A kettle is used for boiling water.

APPLIANCES
Appliances are electric machines used
in the kitchen.

CORK

A cork is a stopper for a bottle. You take
the cork out of a bottle of wine before you
drink the wine.

TITLE: _____

DROWN
When a person suffocates or dies in
the water, he drowns.

QUARREL
When two people disagree or fight
with words, they quarrel.

NOD
When someone moves his head down.

TITLE: _____

WAVE
A wave is made when the water comes
up and goes down on the ocean or on
a lake.

DAM
A dam is a wall that men build
to hold back moving water such as
a river.

HOSE
A hose is a tube that carries water.
People sometimes use a hose when they

DOCK
A dock is where boats are tied up.

TITLE: _____

WIPER
A wiper is something on cars that is
used to clean the rain from the
windshield.

LEAK
When you have a leak in your roof,
water comes in when it rains.

DRIZZLE
A drizzle is when rain is very fine
and light.

DOWNPOUR
A downpour is when it rains very,
very, hard.

TITLE: _____

BULB
A bulb is a round object used to
give electric light.

CUSHION
A cushion is a pillow or soft pad that
you sit on, kneel on, or put your head
on.

CRADLE
A cradle is a small bed that a baby
sleeps in.

TITLE: OTHER

LAPEL
A lapel is the part of the coat
near the shoulder that is turned
back.

FLOCK
A flock is a group of birds or
animals.

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Presenting and rehearsing the words in individually paced subsets seemed more promising for guiding and encouraging the students in the application of strategies. Student worksheets were collected after each vocabulary activity and examined for appropriateness of the group titles created for each box. These showed consistently that students had indeed captured the semantic connections between the words in each group, as evidenced by titles they had created. An example of this is the title ABOUT RAIN, created by a student to label a box containing the words wiper, leak, and drizzle.

The principal difficulty in implementing imagery was in determining whether or not students were using the strategy. Gathering evidence to determine if students actually used imagery was much more difficult than with grouping. There was insufficient time to ask students to describe or to sketch the image they had developed to connect a group of words in some meaningful way. In the absence of any other reliable method, instructors could only spot check occasionally, stopping vocabulary presentation to question a student or two about the image they had created. When asked, most students were able to relate a picture that incorporated the words in a specific group. However, some students appeared to feel ill at ease and embarrassed at this active use of the imagination, and resisted the use of imagery.

A time-related difficulty developed in implementing self-evaluation for the metacognitive group. This strategy required students to evaluate their own progress in learning vocabulary. The implementation problem arose, not

because students found the strategy difficult, but rather because there was seldom enough time for them to write in their journals. The 3 minutes allotted to this task seemed to disappear in distributing and collecting papers and in attending to normal classroom activities such as answering questions. The inconsistent application of the self-evaluation strategy resulted in only minimal differences in the approach of the metacognitive group and the cognitive group to learning vocabulary.

Because the time devoted to vocabulary instruction in the control group involved no training in the use of strategies, students had an opportunity to apply their customary approaches to learning. The students in this group were given a list of the vocabulary words and their definitions and sat quietly while the instructor presented the words with slide or definition. They were told simply to learn the words in whatever way they normally did. Observation of the students at work revealed far more information about their typical strategies than the answers they provided to the worksheet (shown in Appendix N). The students seemed to rely upon rote strategies such as repetition (either sub-vocal or written), translation into their native language, or a form of imagery where they drew a tiny picture of what a word represented. This latter strategy seemed to be coupled most frequently with the words presented pictorially. They used the 4 minutes of study time to concentrate deeply on the word list. No students were observed to quiz each other as a means of study; all worked alone in their own particular manner.

LISTENING INSTRUCTION

General Procedures

The listening task that students were requested to perform was to remember information presented in a five minute videotape on an academic subject such as history or geography. The videotapes were specifically designed for the project to simulate a lecture experience the students might encounter in school. There were four videotapes presented on different days that covered the following topics: the River Thames, uses of pigs, the life of Houdini, and bilingual education. A short listening comprehension test following each lecture contained items designed to assess Bloom's knowledge, comprehension, and analysis levels. Videotapes were presented sequentially in order of judged difficulty of the content based on the pilot test. In addition to the training videotapes and their corresponding tests, a pretest videotape was presented on Lewis and Clark's journey to the Pacific Coast, and a posttest videotape was presented on Captain Cook's three trips to the South Pacific.

Listening Treatment Conditions

Metacognitive Group. The metacognitive group received instruction on one metacognitive strategy, one cognitive strategy and one social mediating strategy. The metacognitive strategy was selective attention, the cognitive strategy was note-taking, and the social mediating strategy was cooperation (see Appendix O for the teacher's script). For selective attention, students were instructed to listen selectively for important

words typically used in lectures to present an overview, a main topic, main points, examples, and a conclusion or summary (see Appendix P for a list of these phrases). For example, a phrase such as "Today I want to tell you about..." suggests that the speaker is signalling the main topic, while "first," "second," etc. indicate that main points are likely to follow. The videotapes had been designed specifically to include these and other markers (see typical lecture script in Appendix Q). Students were instructed on note-taking by means of a T-list (Hamp-Lyons, 1983) in which main points are entered on the left side of a page and corresponding examples or details are entered adjacently to the right (see Appendix R). Thus, by selectively attending to phrases or words that often preceded important lecture points, students were able to facilitate note-taking. The instructors were to observe students taking notes and to collect the notes after a brief study period. Students initially were provided a T-List that supplied main points so that students had to write in relevant examples and details in the blanks. Subsequent T-lists had diminishing cues where only one or two main points were provided and the student filled in the rest. The final T-list had no cues and contained only a "T" on the paper.

As a final step, students were instructed to use cooperation as a strategy to verify the accuracy of their notes, enabling them to fill in gaps in information or clarify areas of confusion by using their peers as a resource. Students were to check their own notes against those of one or several peers to fill in missing information or to correct inaccuracies after coming to a consensus with a peer. After each lecture the students completed a short 8- or 9-item listening comprehension test (see Appendix S f r copies of the four daily listening tests).

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Cognitive Group. The strategies taught to the cognitive group for the listening activity were note-taking and cooperation. Instruction in these strategies was identical to that received by the metacognitive group. However, they did not receive any information regarding selective attention or markers that often occur in lectures to highlight important information.

Control Group. Students in the control group received no strategy instruction. They were simply told to listen to the videotapes and do whatever they normally did to help them understand and remember a lecture.

Implementation of Strategy Training for Listening

The listening training for the metacognitive group was implemented without difficulty. Instructors observed students taking notes, and the note sheets were collected and compared to a teacher's key. Students were observed selectively listening as they physically prepared themselves to take notes when they heard the phrases that introduced main points and summaries. They poised their pencils whenever they heard the expressions, seemed to listen more intently, and wrote furiously when the information followed the special expressions. The students also took full advantage of the cooperation period by conferring with those around them or someone across the room. Initially, students were allowed the full study time to cooperate. However, some students spent the whole study time copying notes when the lectures got more difficult and had no time to look over their notes. This was remedied by limiting the cooperation time to three minutes and the study of notes to two minutes. Students were cautioned before the lecture that they were to merely fill in the main ideas during the cooperation if they had failed to understand them during the lecture itself.

Students with particularly low comprehension seemed unable to use selective attention profitably. While they understood the special expressions, they were not able to extract important words out of the imformation that followed these expressions and missed main points. Obviously, some basic work in the use of inferencing would have helped these students. For the majority of the metacognitive students, however, selectively attending was very useful. Alerting them to the special expressions gave them a way of sifting out important from unimportant parts. This was evident in their ability to take notes accurately or to approximate information that they heard after the special expressions, as evidenced by their notes.

The cognitive group appeared to have difficulty anticipating the lecture content and preparing themselves to receive important information. While the T-List provided a framework, these students reported being overwhelmed by the rapidity of the lecture. This presumably stemmed from their inability to selectively attend to some parts and to ignore others. They seemed to be processing every part of the input equally and had few ways of determining the relative importance of the input. The more proficient students, however, either consciously or unconsciously made use of selective attention of the special expressions. This was evident in their notes, their listening scores, and in their later use of the special expressions in their oral presentations as reported later in the speaking instruction.

The control group was also observed by instructors as they listened to the lecture. Some students took notes that consisted of isolated phrases and sporadic words in their native language. Only one or two students

discussed the lecture during the study time even though they were explicitly told that they could discuss the lecture with each other if they wanted to. The majority of the students sat and stared into space or nervously tapped their pencils. As far as the instructors could surmise, the students did not structure their study time and felt that the few minutes given them were a waste of time. One highly proficient student even remarked that the test should be given immediately after the lecture so that the students would not forget the material. If the listening test had been delayed a greater amount of time, e.g., a day, the control group might have exhibited more strategies. It was evident that the control group was relying on some sort of short term memory to recall the information required to complete the test.

SPEAKING INSTRUCTION

General Procedures

In the speaking task, students were asked to present a brief oral report on one of six subjects that had personal or cultural significance. The topics included the following possibilities: My first day in the United States, two differences between people of my country and people in the United States, special traditions in my country, and the most interesting person I have known. Four separate oral presentations were made on four separate days. Report preparation was completed in class to ensure comparable time on task across treatment groups. In presenting the report, students sat in small groups, spoke or read from written notes, and used a tape recorder. The tape recorder was used to obtain pretest and posttest measures on oral proficiency, but was also used in practice sessions so students would become comfortable with speaking while a tape recorder was running.

Speaking Treatment Conditions

Metacognitive Group. The metacognitive group received instruction on one metacognitive strategy, functional planning, and one social mediating strategy, cooperation. Functional planning, similar to procedures described by Stevick (1984), involves having the learner analyze the requirements of a communication task, and determine if he or she has the language skills required to fulfill those requirements. During instruction on the use of this strategy, students were first led by the teacher through an analysis of the purposes language serves in an oral report (see Appendix T for the teacher's script for introducing speaking strategies.) For example, one must first tell the audience what the report is about. One or two main ideas have to be communicated and some support for these ideas has to be furnished. The report must also have an ending. The instructor elicited many of these functions from the students and supplied missing functions as needed. In the next step, the instructor had the students speculate on the language needed to fulfill the functions, e.g., to tell the audience what the report is about, one could say "this report is about two important customs." After a series of important expressions had been elicited from the students, the instructor asked the students to reorder the expressions according to the logical organization found in oral presentations, e.g., introduction, main body, and conclusion. These parts were labeled on the board and a list of functions and the English expressions signalling those functions was distributed (see Appendix P). These expressions were essentially the same ones found in the listening task and overlapped with the list elicited from the students at the beginning of the speaking activity. The instructor explicated the list to

ensure comprehension and then supplied a handout (see Appendix U) with important functions filled in and blanks where the students were to write their reports. The instructor selected one student to reveal his or her topic and one or two main ideas and orally walked the students once again through the process of identifying the functions and selecting the appropriate English for those functions. After the instructor checked that each student had selected a topic from the list, the students were given fifteen minutes to complete a draft of their oral presentation.

For the <u>cooperation</u> strategy, students practiced presenting their reports with a small group of other students. The instructor assigned members to each group and gave each student a specific responsibility (see Appendix V for the teacher's script on cooperation). The students listening to the report were to listen to specific factors of volume, pace, organization, and comprehensibility. After a student read a report once, the other students were to give specific feedback on the factors. The performing student was given a sheet of questions to ask the other students (see the sheet entitled "For the Person Reporting" in Appendix W) and the listening students were given a sheet of questions that would help them concentrate on the specific factor (see the sheet entitled "For the Team Members" in Appendix W) and provide valuable feedback. The performing student then had to adjust his perfomance according to these comments and get help from his peers regarding the pronunciation of certain items, the pace, volume, and organization of the report. The final performance was then recorded.

<u>Cognitive Group</u>. This group received instruction using cooperation as a strategy to improve their reports. They were not offered any other strategies in conjunction with the speaking activity.

Control Group. The control group received no strategy instruction but was given the list of topic possibilities and told to prepare an oral report on the topic of their choice in whatever manner they normally prepared for such an activity. This group also tape recorded their report in the presence of a small group of students during practice sessions, but was not instructed to provide systematic feedback to their peers.

Implementation of the Strategy Training for Speaking

Instructors initially expected that students could make an oral presentation by following rough notes. However, this proved to be too threatening and too difficult of a task for ESL high school students. Therefore, students were encouraged to look up occasionally from their papers, but were permitted to read the report. While this may be similar to a "read aloud" activity, the fact that students were using expressions found only in formal oral presentations and were encouraged to be expressive and use vocal qualifiers made it an oral activity as opposed to a reading activity.

While the metacognitive group was slow initially to think of functions found in oral reports, once the activity was underway, they were able to contribute many functions to the list. Because they were cued to use expressions signalling important functions, these expressions appeared in all of their reports. When an expression was used inappropriately, the instructor gave the whole class feedback on the expression without approaching the individual student who had misused the expression. Because time was limited, this was the only type of feedback that students received

from the instructor on their oral reports. Most students were able to
complete the task in the allotted time and were enthusiastic about the
framework provided them to facilitate composing the reports. They were
also very enthusiastic about recording their reports. They enjoyed
listening to themselves after all the reports had been recorded for the
group.

Using cooperation with the speaking activity was difficult to implement
initially because students were reluctant to provide feedback to their
peers. Instructors had simply written guidelines for providing feedback on
the board. Subsequently, the instructors prepared two sets of more
structured guidelines and questions about the oral presentation; the first
was distributed to each student making a presentation and contained several
questions s/he was to ask the students listening to the presentation. The
second set of guidelines was distributed to the listeners, and each student
was assigned a particular question to answer regarding the pace, volume or
organization of the report. Instructors collected these sheets after the
activity and checked for answers to the questions. Instructors also
observed and coached students on the cooperation segment by circulating
among groups while the activity was occurring. The entire speaking
activity was very popular among students in general. Students who were
very shy and reluctant to speak initially were very verbal by the end of
the treatment and looked forward to working in their groups and recording
the report.

The only other problem encountered in the cooperation segment of the
speaking activity was that students had to be assigned to groups by sex,
native language, and oral proficiency. At first, students grouped

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themselves with others who shared their native language and tended to speak their native language to discuss the reports. Instructors quickly reassigned students to mixed native language and same sex groups, and tried to pair several proficient students with several less proficient students. Groups of same sex were assigned because female Asian students tended to be inhibited around the opposite sex. These changes proved beneficial to the smooth running of the cooperation segment, and students were observed actively helping one another.

The cognitive group also enjoyed the cooperation and recording phases of the oral activity. While they had no problem writing a report of half a page in the allotted time as instructed, their reports showed little organization as evidenced by the lower speaking scores given by the independent judges (see Results Section). Interestingly enough, some expressions that had been explicitly introduced to the metacognitive group were used by one highly proficient student in the cognitive group. Apparently, the student noticed the use of these expressions in the listening activity and appropriately incorporated them into her own report.

The control group was allowed the same amount of time to write reports and to practice them. In lieu of the strategy training, they were given unrelated written vocabulary and reading exercises at the end of the hour to fill the time normally used for the strategy training. These written exercises were graded and returned every day so that students would feel that the written exercises were part of the program. The control group was observed to write reports and record them. Even though they were put into small groups, the students did not offer any feedback to each other and for the most part silently read their reports until it was their turn to

record. The presentations were unorganized and reflected little ability to highlight main points, to introduce a topic, or to close the presentation. Many students said "that's all" after a long pause when they ended the report. Students often spoke so softly and so disjointedly that the topic of the report was not identifiable, and most of the production was incomprehensible. For those students whose proficiency was high enough to be comprehensible, their reports usually consisted of utterances strung together in an unplanned way. As a consequence, when they recorded, they sounded as if they had less confidence than either the cognitive or the metacognitive students.

OVERALL ANALYSIS OF TRAINING IMPLEMENTATION

The major difficulty in implementing the treatment was with vocabulary instruction. For both metacognitive and cognitive groups, the combined grouping and imagery strategies proved exceptionally problemmatic due to time constraints. The combined strategy approach had been pilot-tested with a small group of Hispanic students who had been demonstrably enthusiastic about its successes. The failure of attempts to implement the strategy in the present study indicated that this success of the combined strategy approach was limited to a specific context. A variety of modifications were attempted in the original treatment to assure that students in the present study would use the strategy and that there would be sufficient opportunity to rehearse. For the metacognitive group, there was insufficient opportunity to use self-evaluation before the students were required to take the criterion test on the day's lesson. Because of the adjustments made due to time constraints, students exposed to vocabulary instruction with both the metacognitive and cognitive groups did

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not have a single, coherent treatment that was consistently across the schools. Students in the control group for vocabulary instruction, unlike the controls for listening and speaking, used their preferred strategies and rehearsed persistently in preparation for the criterion test. The vocabulary instruction implementation difficulties and the control group's use of strategies can be expected to emerge as influential factors in analyses of quantitative data from the study. Future attempts to implement grouping and imagery strategies should begin with the last instructional modification used for this study.

One implementation issue should be noted in relation to how the training deviated from typical classroom practice. Normally, review and correction of student work form an integral part of improvement in the classroom and provide students with valuable insight into their performance. The schedule in the metacognitive and cognitive groups was so tight that there was little time available to provide the students with constructive feedback about their progress. All instructors felt the lack of this critical element. Therefore, any future strategy training should allocate sufficient time to give the student more feedback about their work with the strategies and materials in question than was possible in this study.

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III. RESULTS

Data analyses for this study will be presented in four categories. The first analysis is a preliminary analysis of the comparability of treatment and control groups at the pretest and the range of pretest scores. The second analysis shows comparisons of treatment groups at the posttest on measures of vocabulary, listening, and speaking. The prediction is that the order of effects on each outcome variable will be the metacognitive over the cognitive group, and the cognitive group over the controls. A related analysis presents the results of comparing the treatment groups on listening tests administered after each of the four listening strategies training sessions. The third analysis shows ethnic group differences for the different treatment conditions. The final analysis is a process analysis of the degree to which students trained on specific strategies actually used them in performing the learning task relative to controls. This analysis is based on questionnaire data on learning strategy uses, and worksheets.

Preliminary Analyses

A number of preliminary analyses were performed to determine the initial comparability of the treatment groups and to determine the range of test scores at the pretest. Although random procedures had been used in assigning students to treatment groups, it would still be possible to find marked differences between students in the different treatment conditions that could distort the findings. The range of scores was of interest to determine if ceiling or floor effects could influence the results.

Means and standard deviations of pretest and posttest data on the three

treatment groups for each measure (vocabulary, listening, speaking) are

presented in Table 3. Analyses of variance testing the significance of

differences among the three groups are presented in Table 4. The treatment

group differences for the combined pretest and posttest data approached

significance at the .05 level for vocabulary and listening and were

significant beyond the .01 level for speaking. Further analysis of

differences among the three groups for each measure at the pretest

indicated that there were no significant differences among the groups in

vocabulary, but significant differences for listening (beyond .01), and no

pretest differences on speaking. On the listening pretest, the cognitive

group performed more poorly than the metacognitive group or the control

group. Interpretation of the analysis of covariance for listening shown

later should allow for this finding.

Inspection of the mean vocabulary scores at pretest and posttest relative

to the total number of items showed that the pretest means ranged from 66

to 73 percent of the total items. On the listening test, the pretest means

ranged from 47 to 58 percent of the items. The possibility of a ceiling or

floor effect was therefore negligible on the total vocabulary and listening

scores. As will be discussed in a later section, however, there may have

been a vocabulary posttest ceiling effect for recognition but not for

recall items. Scores for speaking were based on a range from 0 to 5. The

means ranged from 2.80 to 3.59, and the standard deviations ranged from .69

to .94, suggesting that floor and ceiling effects were negligible for

speaking as well.

The most dr_matic finding revealed in Tables 3 and 4 is the significant

increase from pretest to posttest on all three measu es. As would be

TABLE 3

Means and Standard Deviations of Treatment and Control Groups at Pretest and Posttest on Measures of Vocabulary, Listening, and Speaking

Variable	Value	Metacognitive (n=27)		Cognitive (n=26)		Control (n=22)	
		Mean	SD	Mean	SD	Mean	SD
Vocabulary	Pre	14.04	2.81	13.04	3.04	13.95	3.77
(32 items)	Post	22.85	4.84	21.08	4.34	23.36	4.81
Listening	Pre	7.00	2.60	5.65	2.70	6.82	2.11
(12 items)	Post	8.48	2.16	7.81	2.02	7.45	2.34
Speaking	Pre	2.93	.83	2.81	.94	2.52	.87
(0-5 scale)	Post	3.58	.88	3.08	.80	2.82	.73

TABLE 4

Analyses of Variance for Treatment and Control Groups at
Pretest and Posttest on Vocabulary, Listening, and Speaking

Variable	Source	df	Mean Square	F	p
Vocabulary	A Treatment	2	44.05	2.75	.07
	B Pre/Post	1	2847.75	177.77	<.01
	AB Interaction	2	6.49	.41	.67
	Error	140			
Listening	A Treatment	2	13.46	2.42	.09
	B Pre/Post	1	78.46	14.08	<.01
	AB Interaction	2	7.14	1.28	.28
	Error	140			
Speaking	A Treatment	2	3.92	5.48	<.01
	B Pre/Post	1	6.17	8.65	<.01
	AB Interaction	2	.59	.83	.44
	Error	140			

expected in vocabulary, all three groups exposed to word lists during
training performed better than they had earlier without exposure. With
listening, the results were significant but were not so clearly
interpretable: While all pretest groups had equal exposure to the
videotapes and had study opportunities throughout training, the listening
posttest had never been seen by any group. Under these circumstances, the
control group would not be expected to show pretest-posttest improvements,
given their lack of prior exposure and strategy training. Differences in
the content and test difficulty may have accounted for some of the
difference that was found. With speaking, the findings reveal improvements
for the metacognitive group and less so for the cognitive group but
virtually no improvement for the control group.

Posttest Analyses

Posttest scores are shown in Table 5. Results are displayed of an analysis
of covariance contrasting differences among metacognitive, cognitive, and
control groups on each of three posttest variables: the vocabulary,
listening, and speaking posttests. In each analysis, the covariate was the
pretest for the corresponding outcome variable. Values shown in the table
are the group adjusted means and standard deviations, the p-value, or the
probability that the obtained F-value was significant, and the R , a
measure of association between the treatment and the outcomes.

Vocabulary. For the vocabulary posttest, it is evident that the results of
training are not statistically significant, shown by the p-value of .349,
and that the mean score for the control group is slightly higher than the
mean for the treatment groups. What this suggests is that students not
only had difficulty in implementing the strategies, but were even somewhat

TABLE 5

The Effect of Learning Strategy Training on
Selected Language Skills Controlling for Pretest Scores

Variable	Metacognitive (n=27)		Cognitive (n=26)		Control (n=22)		p-value	R^2
	Adj Mean	SD	Adj Mean	SD	Adj Mean	SD		
Posttests								
Vocabulary (32 items)	22.66	4.76	21.41	4.23	23.21	4.90	.349	.17
Listening (13 items)	8.25	2.12	8.18	2.00	7.30	2.31	.162	.30
Speaking (0-5 scale)	3.60	.88	3.04	.80	2.88	.73	.008	.20

less efficient in their learning than students using their customary strategies. This is consistent with the experiences of other investigators who have tried to train students to use strategies that compete with techniques to which the students have become accustomed (Brown, Bransford, Ferarra, & Campione, 1983). One explanation for these results is that the key to enhancing memory for vocabulary, as Levin (in press) suggests, may be exclusively in one-to-one interactive verbal/imagery associations rather than in imagery alone. However, it could also be that *using grouping and imagery as a combined strategy is sufficiently difficult for most persons that only individuals with high imagery can make use of the unified strategy, suggesting differences in cognitive styles.* The difficulty of using the combined strategy might make it advisable to present the training individually, as has been discussed with other associational strategies (Hall, Wilson, & Patterson, 1981; Levin, Pressley, McCormick, Miller, & Schriberg, 1979; Pressley, Levin, Digdon, Bryante, McGivern, & Ray, 1982). We plan in the future to explore the difficulty question further through additional interviews with expert learners before using the grouping and imagery treatment in an additional study. Analyses of daily vocabulary tests did not show any significant differences between the treatment groups.

Additional analyses of the vocabulary posttest were conducted to determine if differences occurred depending on the task, the stimulus, or the recency of vocabulary presentation. There were two types of items on the vocabulary test defining the task: recognition and recall items. For each type of item, there were two types of stimuli: pictorial (presented with slides) and verbal (presented by reading a definition). For recognition items, students were required to select one of four words on their answer sheet which corresponded to either the slide presented or the definition.

For recall items, students were required to produce the word corresponding to the presented slide or definition, and write this on their answer sheet. Additionally, half the vocabulary items had been presented during the first week of training (a delayed list), while half had been presented during the second week of training (a recent list). Conceivably, differences between treatment groups could have been manifested depending on the task, the stimulus, or the recency of presentation, given that the difficulty of the task would be greater for recall, verbal, and delayed lists. The results of these analyses are shown in Tables 6 and 7.

Table 6 presents only the mean test scores for each treatment group for each type of test item. Data for pictorial vs. verbal stimulus presentations are collapsed in Tables 6 and 7 due to the small numbers of items involved. Table 7 presents the two-way analyses of variance for the treatment (metacognitive, cognitive, control) and testing (pre, post) conditions on each variable. Analyses of variance rather than covariance are presented because in some cases the number of items representing a posttest variable was small and the pre-post correlation was not sizeable enough to warrant a covariance analysis.

Discussion will focus on the mean scores and the analysis of variance values for treatment and interaction between treatment and pre/post results. Although the interaction term in Table 7 has meaning, the analysis of variance results for the pre-post difference is not. Pretest items could not be differentiated into "recent" and "delayed," making such a pre-post analysis of variance inappropriate. The posttest values for "recent" and "delayed" vocabulary items are subsets of the full vocabulary posttest and correspond to the duration between training exposure and the posttest. The duration for recent items was 3-5 days, whereas the duration for delayed items was 7-10 days.

TABLE 6

Means and Standard Deviations of Treatment and Control Groups at Pretest and Posttest on Vocabulary Subtests

Pre- or Posttest	Type of Task	Training to Testing Interval	Metacognitive (n=27)		Cognitive (n=26)		Control (n=22)	
			Mean	SD	Mean	SD	Mean	SD
Pre	Total (32 items)	N/A*	14.04	2.81	13.04	3.04	13.95	3.77
Post	Recognition	Recent (10 items)	8.41	1.37	8.34	1.55	8.82	1.40
		Delayed (10 items)	8.22	2.01	7.54	1.88	8.77	1.51
	Recall	Recent (6 items)	3.85	1.77	3.35	1.50	3.41	1.79
		Delayed (6 items)	2.37	1.57	1.85	1.49	2.36	1 40
Post	Total	Recent (16 items)	12.26	2.71	11.69	2.51	12.23	2.82
		Delayed (16 items)	10.59	3.08	9.38	2.80	11.14	2.46

* "Recent" and "delayed" items refer to the training-to-testing interval relative to the posttest. The interval for delayed items was roughly 7-10 days, whereas the interval on recent items was about 3-5 days. This distinction does not apply to the pretest.

TABLE 7

Analyses of Variance for Treatment and Control Groups at
Pretest and Posttest on Vocabulary Recognition and Recall Tasks by Testing Interval

Type of Task	Training to Testing Interval	Source	df	Mean Square	F	p
Recognition	Recent	A Treatment	2	4.21	1.3	.29
		B Pre/Post	1	25.63	7.7	.01
		AB Interaction	2	.82	.25	.78
		Error	144	3.33		
	Delayed	A Treatment	2	11.83	2.99	.05
		B Pre/Post	1	52.81	13.33	<.01
		AB Interaction	2	.86	.22	.80
		Error	144	3.96		
Recall	Recent	A Treatment	2	3.14	1.11	.33
		B Pre/Post	1	23.21	8.18	<.01
		AB Interaction	2	.13	.05	.96
		Error	144	2.84		
	Delayed	A Treatment	2	3.28	1.30	.28
		B Pre/Post	1	172.81	68.20	<.01
		AB Interaction	2	.31	.12	.89
		Error	144	2.53		
Total	Recent	A Treatment	2	9.78	1.13	.33
		B Pre/Post	1	97.61	11.23	<.01
		AB Interaction	2	.72	.08	.92
		Error	144	8.69		
	Delayed	A Treatment	2	25.39	2.80	.06
		B Pre/Post	1	416.67	46.01	<.01
		AB Interaction	2	2.21	.24	.78
		Error	144	9.06		

Examining the analysis of variance results presented in Table 7, the only significant difference between treatment group performance ($p=.05$) was on the recognition-delayed items. Inspection of the mean scores presented in Table 6 reveals that this difference favors the control group. This finding is the reverse of hypothesized results; although the metacognitive group did outscore the cognitive group, both groups were outscored by the control group. Pretest results show that there were only modest but nonsignificant differences between the groups at the beginning of training and that there was no ceiling effect in any of the group's performance.

Table 6 also shows that, while there may been a ceiling effect for posttest items of recognition, there was none for recall, especially for the delayed recall items. Further, there was a consistent difference between the mean scores on recent recall items and delayed items; as hypothesized, more recent items were recalled than delayed items. This finding did not extend to recognition items, where there was only a minimal difference in mean scores between recent and delayed items favoring the recent items. Overall, students correctly identified the recent items more frequently than the delayed items.

Listening. Analyses of posttest scores on listening approached but failed to reach significance, although the scores fell in the predicted direction. To explore this finding further, analyses of the daily tests on listening are presented in Table 8. To understand these results, it is important to know that Listening Tests 1 and 2 had 8 items, and Listening Tests 3 and 4 had 9 items. In contrast, there were 13 items used on the posttest. The approximate difficulty level of the daily tests can be seen from inspection of the mean scores for the control group, bearing in mind the differences in numbers of items on which these scores are based. It is evident from the results presented in Table 8 that significant effects were obtained on

TABLE 8
The Effects of Learning Strategies Training on
Listening Skills, Controlling for Pretest Score

Daily Listening Tests	Metacognitive (n=27)		Cognitive (n=26)		Control (n=22)		p-value	R^2
	Adj Mean	SD	Adj Mean	SD	Adj Mean	SD		
1	6.03	1.29	5.91	1.45	5.46	1.47	.096	.26
2	6.45	1.48	6.54	1.22	5.45	1.50	.004	.36
3	6.27	2.33	6.95	1.61	5.17	2.31	.043	.29
4	5.25	1.32	5.10	1.68	5.09	1.57	.626	.10

Listening Test 1 beyond the .10 level, on Listening Test 2 beyond the .01 level, and on Listening Test 3 beyond the .05 level. In each case, the treatment groups were superior to the control group, although for Test 2 and 3 the levels for the metacognitive and cognitive group were reversed from the predicted direction. The important point was that the treatment groups outperformed the control group significantly on two out of four daily tests, and outperformed the control group to a degree that approached significance on a third.

There are at least two possible explanations for the poor performance of the treatment groups on the fourth listening test and on the posttest. One is that the cues were faded too quickly across successive days of training so that students failed to use the strategies that had proven successful earlier. We can determine this from the process analyses of daily work sheets, to be presented in a later section. A second possibility is that there was an interaction between strategy effectiveness and the difficulty of the task. As noted earlier, the videotapes and daily tests were sequenced in order of increasing difficulty leading up to the posttest, although Listening Test 4 and videotape 4 were judged even more difficult than the posttest. One additional factor contributing to the difficulty of the task was that study time was limited to five minutes. This suggests that there may be reasonable limits to the effectiveness of learning strategies training. When the material becomes exceedingly difficult, and the time to study limited, the strategies may fail to improve performance.

Speaking. Posttest analyses for the speaking test were significant in the predicted direction beyond the .01 level (see Table 5). The adjusted mean scores shown can be converted into a 1-5 FSI-type scale to reveal that the

metacognitive students scored on the average close to the 2+ level, whereas the control group scores were just below the 2 level. This amount of difference represents a substantial increment in language skills over the control group. The principal differences between a 2 level and a 2+ level on the scoring system we used were that a 2+ person had more organization, as suggested by clear subordination and sequencing of parts of the report, and greater comprehensibility.

Ethnic Group Differences

Specific analyses of the results were performed to determine whether or not the treatment was differentially effective for the three ethnic categories in the study: Hispanic, Asian, and other. Table 9 shows posttest results for the three types of language tasks for each ethnic group. Table 10 presents the two-way analyses of covariance for treatment groups by ethnicity for the posttest variables. The pretest corresponding to the posttest is the relevant covariate in each analysis.

Inspection of Table 10 reveals that there was a nearly significant ethnic effect ($p = .08$) for vocabulary tasks at posttest. Examining the adjusted mean scores presented in Table 9, the effect favors the Asian students, who were followed by the Hispanics and the students in the "other" category, in that order. This was to be the only ethnic effect nearing significance.

The only significant treatment effect, as noted in prior discussion, was found in speaking performance ($p = .02$). The difference was in the predicted direction with the metacognitive group outscoring the cognitive group, which in turn outperformed the control group.

TABLE 9

Adjusted Mean Scores of Treatment Groups by Posttest Variable and Ethnicity

Variable	Ethnicity	n	Metacognitive (n=27) Adj. Mn.	Cognitive (n=26) Adj. Mn.	Control (n=22) Adj. Mn.	Total
Vocabulary (32 items)	Hispanic	21	22.58	21.63	23.16	22.42
	Asian	33	23.65	22.70	24.23	23.49
	Other	21	20.79	19.84	21.37	20.63
	Total	75	22.23	21.60	23.13	22.39
Listening (13 items)	Hispanic	21	8.47	8.35	7.49	8.14
	Asian	33	7.95	7.83	6.97	7.62
	Other	21	8.61	8.49	7.63	8.28
	Total	75	8.28	8.16	7.30	7.95
Speaking (0-5 scale)	Hispanic	21	3.63	3.17	2.95	3.26
	Asian	33	3.47	3.01	2.79	3.10
	Other	21	3.54	3.08	2.86	3.17
	Total	75	3.54	3.08	2.86	3.17

TABLE 10

Two-way Analyses of Covariance for Treatment Groups by Ethnicity for Posttest Variables

Variable	Source		df	Mean Square	F	p
Vocabulary	A	Treatment	2	13.77	.73	.49
	B	Ethnicity	2	49.39	2.63	.08
	AB	Interaction	4	10.04	.53	.71
		Error	65	18.01		
Listening	A	Treatment	2	6.59	1.87	.16
	B	Ethnicity	2	3.30	.94	.40
	AB	Interaction	4	2.58	.73	.57
		Error	65	13.64		
Speaking	A	Treatment	2	2.64	3.97	.02
	B	Ethnicity	2	.15	.22	.80
	AB	Interaction	4	.28	.43	.79
		Error	65	.67		

Table 11 shows the relative performance of the three ethnic groups on the daily listening tests. Table 12 shows the analysis of variance for the treatment groups (metacognitive, cognitive, control) by ethnicity (Hispanic, Asian, other) for the four daily listening tests. The purpose of these analyses is to determine if there were treatment differences by ethnicity on these four tests. Because the number of items varied on these daily tests, mean scores in Table 11 have been converted to percentages to simplify comparison. These scores have not been adjusted (as those in Table 8 were) and represent actual student performance.

For the first two tests, the total scores for combined groups fell in the predicted direction, with the metacognitive group outperforming the cognitive group, which in turn scored better than the control group. On the third test, the treatment groups outscored the control group, but the direction for the metacognitive and cognitive groups was reversed. On the fourth listening test, however, all groups did relatively poorly. This variation in raw scores on daily listening tests reveals a different order of means than occurred on the pretest, as shown in Table 11 for the total group. At the pretest, the total cognitive group was substantially below the other groups, a pattern that is repeated on the posttest. However, results on the daily listening tests indicate that the cognitive group improved relative to the control group, at least through Test 3. This is consistent with the interpretation offered earlier that the treatment was affecting the group performance.

Analyses by ethnicity revealed that the Hispanic metacognitive group performed better than any other ethnic or treatment group except in the

TABLE 11
Mean and Percent Correct on Daily Listening Tests
by Treatment Group and Ethnicity

Variable	Ethnicity	n	Metacognitive (n=27)		Cognitive (n=26)		Control (n=22)	
			Mean	%	Mean	%	Mean	%
Pretest	Hispanic	21	8.29	64	5.00	39	7.63	59
(13 items)	Asian	33	6.85	53	5.36	41	6.56	51
	Other	21	6.00	46	6.44	50	6.00	46
	Total	75	7.00	54	5.65	44	6.82	53
Listening 1	Hispanic	21	5.86	73	6.00	75	5.63	70
(8 items)	Asian	33	6.15	77	5.73	72	5.56	70
	Other	21	6.71	84	5.67	71	5.20	65
	Total	75	6.22	78	5.77	72	5.50	69
Listening 2	Hispanic	21	7.29	91	6.50	81	6.13	77
(8 items)	Asian	33	6.38	80	6.36	80	5.00	63
	Other	21	6.14	77	6.11	76	5.60	70
	Total	75	6.56	82	6.31	79	5.45	68
Listening 3	Hispanic	21	8.00	89	6.33	70	6.00	67
(9 items)	Asian	33	6.31	70	6.27	70	5.00	56
	Other	21	4.86	54	6.78	75	5.00	56
	Total	75	6.37	71	6.46	72	5.36	60
Listening 4	Hispanic	21	6.29	70	5.67	63	5.13	57
(9 items)	Asian	33	5.00	56	4.45	49	4.89	54
	Other	21	4.71	52	4.89	54	5.60	62
	Total	75	5.26	58	4.88	54	5.14	57

TABLE 12

Analyses of Variance for Treatment Groups
by Ethnicity for Daily Listening Tests

Variable	Source	df	Mean Square	F	p
Pretest	A Treatment	2	11.26	1.87	.16
	B Ethnicity	2	9.25	2.36	.13
	AB Interaction	4	6.24	1.52	.24
	Error	6			
Listening 1	A Treatment	2	3.29	1.54	.22
	B Ethnicity	2	.04	.02	.98
	AB Interaction	4	.91	.43	.79
	Error	66			
Listening 2	A Treatment	2	7.64	3.93	.02
	B Ethnicity	2	3.99	2.05	.14
	AB Interaction	4	.83	.43	.79
	Error	66			
Listening 3	A Treatment	2	10.86	2.69	.08
	B Ethnicity	2	8.80	2.18	.12
	AB Interaction	4	5.89	1.46	.23
	Error	66			
Listening 4	A Treatment	2	.91	.45	.64
	B Ethnicity	2	5.03	2.50	.09
	AB Interaction	4	1.90	.94	.44
	Error	66			

first daily test. However, the only test for which the difference in their performance approached significance (p=.09) was Listening Test 4. There were no significant differences, either by treatment or ethnicity, for the students' performance on the pretest of listening skills. However, the Hispanic students in the metacognitive group outscored all other students at pretest, a pattern that was fairly consistent throughout the daily listening tests. Examining the percentages listed in Table 11 for each group reveals that on three of the four listening tests, the Hispanics achieved the highest listening score in the metacognitive group. The same is true of the Hispanics in the cognitive group and the control group. In each case, the only ethnic group to outscore the Hispanics was the "other" group: for the metacognitive group, this happened on Listening Test 1; for the cognitive group, on Listening Test 3; and for the control group, on Listening Test 4.

Process Analysis

Analyses of process data were conducted to determine whether strategies on which students had been trained were used during task performance, and if strategy use during task performance influenced outcomes. The analysis involved (1) an examination of daily worksheets in vocabulary, listening and speaking activities to see that students were incorporating strategy training into their work; and (2) determining whether or not students who performed below or above the median on a questionnaire asking about learning strategies used during training performed differently on selected posttests.

Observations and Student Worksheets.   As explained in Chapter II where the implementations of each of the three language learning activities were discussed, project instructors were careful to observe students at work and collect student worksheets in order to monitor student use of strategies. For example, vocabulary worksheets involved the creation of a title for each box of words grouped together on the basis of common features. Instructors were able to check the titles created by students and determine if the grouping strategy was understood and appropriately applied.   As discussed in Chapter II, inspection of student worksheets revealed that students indeed understood the concept behind the grouping strategy, as evidenced by their creative titling of boxes of words.   However, it was more difficult to monitor student use of the imagery strategy, since only mental images were to be generated.   Students in both the metacognitive and cognitive groups seemed to feel awkward about this active use of the imagination, and many evidenced a reluctance to close their eyes and participate fully in the imagery process.   This led the instructors to conclude that many students were not applying imagery in the desired manner.   Any future use of this strategy should therefore embed some way of formally verifying student use, whether it be through drawing a crude sketch of the image created or through writing a sentence to describe the image, thus reinforcing the connection formed between the grouped words.

As discussed in Chapter II, instructors verified student use of listening strategies through examination of the T-lists students used to take notes on the videotaped lectures. These worksheets revealed that the notes taken by students in both the metacognitive and cognitive groups matched well with instructor keys. Observation of students using cooperation confirmed

that information was noisily traded among peers to ensure note-taking accuracy. The usefulness of the selective attention strategy for the metacognitive group was most apparent in comparison of T-lists made for the posttest by the metacognitive and cognitive groups: metacognitive T-lists were more complete and showed a clearer subordination of ideas than those made by the cognitive group. Further, observation of student behavior at posttest showed that students in the metacognitive group more easily identified and recorded main points and supporting details than any other group. Clearly, instructors were able to verify that students were using the strategies as planned.

The student use of strategies for speaking was also easily verified. The linguistic markers taught to the metacognitive group appeared in all of their speeches. Use of the cooperation strategy taught to the metacognitive and cognitive group was easily observed by instructors as well. Although students were observed to be rather lenient in criticizing each other's reports, the more proficient students did offer others advice about word choice, pronunciation, or manner of delivery.

In conclusion, instructor observations and analysis of student worksheets amply verified student use of almost all strategies. The only strategy use difficult to verify was imagery. Based on their observation, instructors felt that students did not fully use this as a way of learning vocabulary.

Learning Strategies Inventory. Another means of verifying student use of strategies was to use data from the Learning Strategies Inventory (LSI), a self-report rating scale designed to reveal metacognitive and cognitive learning strategies used with vocabulary, listening, and speaking tasks.

This inventory is displayed in Appendix J. Students responding to the LSI indicated on a 1-4 scale the degree to which they used specific strategies designated for individual language learning tasks. In the general instructions, students were asked to respond for the two weeks prior to the test administration, which included the training period. There were 3 questions for each of 14 learning strategies for a total of 42 items. In addition to a total score and subscores on metacognitive and cognitive strategies used or not used during training, three subscores were also available for each set of items representing the 14 strategies. Analyses indicated that the instrument has sufficient reliability for research purposes, as shown in Table 13. The reliability reported is the median of three correlations computed between subscores for each set of 14 items and is shown in the main diagonal of Table 13. The strength of the off-diagonal relationships displayed in this table does not reveal any consistent pattern as evidence of subscore validity, as would be suggested by metacognitive subscores intercorrelating higher than the correlation between metacognitive and cognitive scores within strategy use category.

Analyses of the LSI subscores for strategies used in training were also conducted to determine the degree to which students in the three treatment groups reported using strategies. The results of these analyses are presented in Table 14, which show simple analyses of variance contrasting the three treatment groups for each variable. Results indicated that none of the various comparisons was significant. Additional analyses were conducted to determine if the percentage of the total possible score represented by the mean for the metacognitive group was larger among the items used in training than among items not used in training. The mean score represented about 67 percent of the items used in training, whereas

Table 13

Intercorrelations and Reliabilities of Learning Strategies Inventory Variables

Variable Definition	Variable					
	1	2	3	4	5	6
1. Metacognitive, Used*	.67					
2. Cognitive, Used*	.46	.72				
3. Total, Used*	a	a	b			
4. Metacognitive, Not Used*	.30	.20	.29	.68		
5. Cognitive, Not Used*	.49	.39	.51	.51	.71	
6. Total, Not Used*	.49	.38	.50	a	a	b

a. Intercorrelation would include part with whole test and is not reported.

b. Not computed.

c. Reliabilities are on the main diagonal.

*Note: The LSI contained items relating to the use of 14 different learning strategies, 7 of which were presented in the training. The terms "used" and "not used" are applied here to differentiate the strategies presented in the training from those tht were not. For a detailed listing of the strategies included in the LSI and whether or not students received instruction in their use, see "the LLSI Strategy Interpretation Key" in Appendix J.

Table 14

The Effect of Learning Strategy Training on
Reported Use of Learning Strategies

Variable (i=items)	Metacognitive (n=27)		Cognitive (n=26)		Control (n=22)		p-value
	Adj. Mean	SD	Adj. Mean	SD	Adj. Mean	SD	
Used in Training							
Metacognitive (i=9)	25.99	4.53	25.60	4.16	25.29	4.20	.82
Cognitive (i=12)	30.34	5.24	31.24	4.98	29.43	4.61	.40
Total	56.32	8.29	56.84	7.17	54.72	7.87	.58
Not Used in Training							
Metacognitive (i=6)	18.30	2.65	18.01	2.30	18.71	2.32	.57
Cognitive (i=15)	40.87	7.50	40.93	5.80	40.91	6.47	.99
Total	59.17	8.99	58.94	7.45	59.62	7.94	.95

the mean was about 70 percent of the items not used in training. Apparently, in responding to the questionnaire, students failed to connect the strategy training over the prior two weeks with the items to which they responded. No specific attempt had been made in constructing the questionnaire to pattern the item wording precisely after phrases used during training, although the items were intentionally balanced among strategies used with vocabulary, listening, and speaking activities. Further, the precise wording of each item did not reinforce the general instructions that students respond only in relation to their behavior during the two weeks of training. What results seems to be an indication of their typical strategy use, not a reflection of their strategy use during training. If the LSI is to be used in the future as a means of verifying student strategy use in experiments of this kind, modifications must be made to ensure that students respond with that purpose clearly in mind.

Analyses of covariance designed to determine if students in the three treatment groups performed differently on outcome measures depending on their reported uses of learning strategies are shown in Table 15. In each analysis, the covariate is the corresponding pretest score. Results indicated that none of the two-way interaction effects was significant (LSI at two levels by three treatment groups). However, the main effects for the LSI and the treatment group were significant for speaking, suggesting that students who reported using learning strategies more in speaking also scored higher on the posttest. This was the only outcome with significant main effects. The significant differences for the treatment conditions on the speaking task were noted earlier in Table 4.

Table 15

The Effect of Learning Strategy Training on Selected
Language Skills by Level of Strategy Use
Controlling for Pretest

Posttest Variable and Learning Strategies Inventory (LSI) Level	Treatment Groups						Two way interaction
	Metacognitive		Cognitive		Control		
	Mean	(n)	Mean	(n)	Mean	(n)	p-value
Vocabulary Total (Delayed)							
LSI Median	10.45	(11)	8.54	(13)	11.55	(11)	.52
LSI Median	10.69	(16)	10.23	(13)	10.73	(11)	
Vocabulary Total (Recent)							
LSI Median	12.18	(11)	10.62	(13)	12.36	(11)	.37
LSI Median	12.31	(16)	12.77	(13)	12.09	(11)	
Listening							
LSI Median	8.09	(11)	7.62	(13)	7.36	(11)	.79
LSI Median	8.75	(16)	8.00	(13)	7.55	(11)	
Speaking *							
LSI Median	3.90	(10)	3.31	(13)	2.82	(11)	.47
LSI Median	3.47	(15)	2.79	(14)	2.82	(11)	

* This was the only posttest variable with significant main effects. The main effects for LSI and treatment group were both significant at p .05.

Discussion

The design of this study focused on determining whether or not learning strategies training would influence performance on a variety of language learning tasks required for academic settings. The training was presented in natural classroom instruction rather than as individual laboratory training, which provides exposure to only a single task and strategy. The range of tasks specifically included more complicated language activities to determine whether learning strategies training would be effective with more complex skills such as listening and speaking. The distinction between metacognitive and cognitive strategies was introduced as a means of identifying the effects of including highly generalizable strategies (metacognitive) vs. strategies that were more specific to individual tasks (cognitive).

The answer to whether or not strategy training can be generally effective for vocabulary learning was never in question owing to the sizeable number of prior studies showing significant results using an associational learning strategy. The question was whether the associational strategy could be simplified by grouping items on a vocabulary list, and whether this instruction would work in small groups. The combined grouping and imagery strategy proved difficult to implement and had to be modified throughout the study. Quantitative analysis suggested that there is a tendency for scores of students trained to use grouping and imagery, with or without self-evaluation, to be suppressed relative to those of a control group using its customary strategies in learning. Informal observations indicate that Asian students, who otherwise were highly efficient rote

learners of vocabulary lists, may have been particularly affected negatively by the introduction of grouping and imagery. There were also suggestions that Hispanic students in the metacognitive group performed consistently better than the cognitive or control groups regardless of the task. Although these findings with Hispanics in particular should be explored, we believe that more detailed observation of expert learners is nevertheless warranted before additional efforts are made to train students to use this approach, and that training effectiveness should be demonstrated individually before moving to group presentations.

In the listening skills task, there were indications that the difficulty of the task and the explicitness of directions to perform the strategies may both be important determinants of subsequent performance. Students presented with a task that is too difficult may find little assistance in using learning strategies either because the initial communication is too complicated or the information is so unfamiliar that learning and retention are suppressed. It could also be true that the transfer of strategies to new tasks may be extemely sensitive, requiring continued prompts and structured directions until the strategies become autonomous.

Skills in speaking a second language were clearly improved through learning strategies training relative to a control group. Students were extremely adept in learning and applying strategies and, in the process, gained in judged organization and comprehensibility. Informal impressions from training were that the effectiveness of strategy training could have been enhanced even more with more structured directions to peers on providing feedback to the student making an oral presentation. The tendency of students to avoid offending another student by being critical, which

initially was a problem, was averted by focusing the peer comments on formal portions of the oral presentation and by making the speaker responsible for assuring that feedback was obtained.

By specifically fading cues for the use of learning strategies across the four presentations of each learning activity, it was anticipated that transfer of strategy training to new tasks could be demonstrated. Failure to find significant differences on the vocabulary task obscured potential relationships between metacognitive strategies and transfer, as did the failure to find differences on the fourth listening test and on the listening posttest. Further, although differences favoring the metacognitive group were evident on the speaking test, the cognitive group also showed differences on the posttest relative to the controls. Thus, the students may have transferred initial training even without metacognitive strategies. One reason for the transfer among the cognitive group members is that the way in which cooperation was used contained elements of evaluation, a metacognitive strategy. Apparently, the type of cognitive strategy combined with another cognitive strategy is as essential as the metacognitive strategy itself.

In sum, for two highly important academic language skills, listening and speaking, learning strategies were shown to be effective in enhancing initial learning. Clear direction is provided to teachers interested in helping students to become more effective learners. Teachers should be confident that there exist a number of strategies which can be embedded into their existing curricula, that can be taught to students with only modest extra effort, and that can improve the overall class performance. This means that teachers need not feel that their role is limited to simply

providing comprehensible input but can include a variety of learning strategies which can be paired with specific types of language tasks. Future research should be directed to refining the strategy training approaches, identifying effects associated with individual strategies, and determining procedures for strengthening the impact of the strategies on student outcomes.

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APPENDIX A

Vocabulary Pretest, Examiner's Directions, and Answer Key

VOCABULARY

NAME: _____   Your first language: _____

SCHOOL: _____   Other languages you speak: _____

DATE: _____   _____

PART ONE

Instructions: Look at the slides and listen to what the teacher says. Then circle the correct letter.

Example: A   B   C   D

_____

1.   A   B   C   D

2.   A   B   C   D

3.   A   B   C   D

4.   A   B   C   D

5.   A   B   C   D

6.   A   B   C   D

7.   A   B   C   D

8.   A   B   C   D

9.   A   B   C   D

10. A   B   C   D

PART TWO

Instructions: Listen to the definition the teacher reads. Circle the letter for the word that has the same meaning.

Example: A.   Flowers

             B.   Oven

             C.   Nail

             D.   Arrow

A

11. A. Talons

    B. Toenails

    C. Claws

    D. Hooks

12. A. Spendthrift

    B. Skinflint

    C. Panderer

    D. Bimbo

13. A. Flutter

    B. Breeze

    C. Draft

    D. Gale

14. A. Mouth

    B. Eyebrow

    C. Grin

    D. Crease

15. A. Pounce

    B. Gait

    C. Strut

    D. Trot

16. A. Sink

    B. Drip

    C. Wash

    D. Cup

A

17. A. Lining

    B. Blazer

    C. Seam

    D. Hem

18. A. Exhale

    B. Sigh

    C. Gasp

    D. Rant

19. A. Sofa

    B. Cot

    C. Hassock

    D. Crib

20. A. Sneeze

    B. Cough

    C. Whistle

    D. Blow

PART THREE

Instructions: Look at the slides. Then, in the blank space below, write the name of the picture.

Example: _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

A

Part Four

Instructions: Listen to the definition the teacher reads. Then write the word
that matches the definition.

Example: _____

27. _____

28. _____

29. _____

30. _____

31. _____

 2. _____

A

VOCABULARY PRETEST
Examiner's Directions

(PASS OUT ANSWER SHEETS TO STUDENTS, SAYING...)

I would like you to answer some questions about words that are often used in English. I want to see how many of these words you know. This will be useful to us in planning how to teach you English.

Now, be sure to write your name on the answer sheet, and also write the name of your school, and today's date. Then write the name of your first language in the space provided. Also write the name of any other languages you speak.

I. MULTIPLE CHOICE SLIDES

The first thing I'll do is show you some slides that have four pictures. Each picture has a letter: A, B, C, or D. When I say a word, look for the picture that matches the word. Then on your answer sheet, circle the letter of that picture. Let's do one together. Here is a slide with four pictures. I want you to tell me which one is an ARROW by placing a circle around the correct letter on your answer sheet. The correct letter is _C_ . A is flowers, B is oven, C is arrow, and D is nail. You should have drawn a circle around the letter C for Arrow. Any questions? Now we'll begin.

(SHOW THE SLIDES ONE AT A TIME, AT ROUGHLY FIVE SECOND INTERVALS, SAYING...)

1. Snake
2. Blender
3. Feathers
4. Dirt
5. Hammer
6. Tieclip
7. Lobster
8. Griddle
9. Scissors
10. Hive

II. RECOGNITION OF DEFINITIONS AND WORDS (no slides)

Now I want you to listen carefully. I will say the definition of a word. Then I will say the four possible answers that are listed on your answer sheet. Listen to all four possible answers. Then I will say the definition of the word again. You will circle the letter on your answer sheet for the word that means the same as the definition.

Let's try an example. I will give you the following definition: "You bake a cake in this." Now I read you the four possible answers: "A - Flower; B - Oven; C - Nail; or D - Arrow." You circle "B-oven" on your answer sheet because you bake a cake in an oven. Any questions? Let's begin with number 11 on your answer sheet.

(PROCEED TO READ THE FOLLOWING DEFINITIONS"

11. The nails on the feet of animals such as cats and dogs.

    A - Talons; B - Toenails; C - Claws; D - Hooks.

    The nails on the feet of animals such as cats and dogs.

12. A person who does not like to spend money.

    A - Spendthrift; B - Skinflint; C - panderer; D - Bimbo.

    A person who does not like to spend money.

13. A very strong wind.

    A - flutter; B - breeze; C - draft; D - gale.

    A very strong wind.

A

14. A line on your face that you make when you smile or frown.

   A - mouth; B - eyebrow; C - grin; D - crease.

   A line on your face that you make when you smile or frown.

15. A kind of walk that shows the person thinks he is very important.

   A - pounce; B - gait; C - strut; D - trot

   A kind of walk that shows the person thinks he is very important.

16. When you turn off a water faucet, but a little water still comes out.
    What is this called?

   A - sink; B - drip; C - wash; D - cup.

   When you turn off a water faucet, but a little water still comes out.
   What is this called?

17. The bottom edge of a skirt or pair of pants that is turned up and sewn
    down.

   A - lining; B - blazer; C - seam; D - hem.

   The bottom edge of a shirt or pair of pants that is turned up and sewn down.

18. A sudden, short breath.

   A - exhale; B - sigh; C - gasp; D - rant.

   A sudden, short breath.

19. A small, narrow bed that can be folded up when it is not being used.

   A - sofa; B - cot; C - hassock; D - crib.

   A small, narrow bed that can be folded up when it is not being used.

20. The noise you make when you have a cold or smell something like pepper.
    It sounds like achoo.

   A - sneeze; B - cough; C - whistle; D - blow.

   The noise you make when you have a cold or smell something like pepper.
   It sounds like achoo.

A

III.   MATCH THE WORD TO THE SLIDE

Now I want you to look again at some slides. This time I want you to remember the name of the picture in the slide. I want you to write down the name of the picture on your paper. For example, look at this slide. (SHOW SLIDE OF AN ARROW.) This is an arrow. Write the word "arrow" on your paper in the space for the example. Spelling does not count, so spell the word as best you can. Guess if you do not know the word. Any questions? OK, let's begin.

(THE FOLLOWING SLIDES WILL BE SHOWN. YOU WILL SAY...)

NUMBER 21 (pause), NUMBER 22 (pause), NUMBER 23 (pause), NUMBER 24 (pause),

NUMBER 25 (pause), and the last one NUMBER 26 (turn off machine).

IV.   RECALL FROM DEFINITIONS (no slides)

Now the last thing I want you to do is remember the word that matches the definition I give you. Listen carefully to the definition I say, then try to think of the word that matches the definition. For example, if I say this definition "The water that falls from clouds to the ground" you would write the word "Rain" in the answer space for the example. Remember, spelling does not count, so spell the words as best you can. Guess if you do not know the word. Any questions? OK, let's begin.

27. A light rain that only lasts for a short time.

28. The top of a room. Look up.

29. The opposite of succeed is _____.

30. The place where zoo animals are kept or the place where you keep a pet bird.

31. The mark that is left on your skin after a cut heals.

32. The part of an airport where airplanes land and take off.

A

VOCABULARY PRETEST KEY

I. MULTIPLE CHOICE SLIDES

1.	C	6.	B
2.	B	7.	C
3.	B	8.	A
4.	D	9.	C
5.	C	10.	C

II. RECOGNITION OF WORDS BY DEFINITIONS (no slides)

11.	C	16.	B
12.	B	17.	D
13.	D	18.	C
14.	D	19.	B
15.	C	20.	A

III. RECALL FROM SLIDES

21.	tools	24.	rose
22.	flashlight	25.	shelf
23.	rake	26.	shovel

IV. RECALL FROM DEFINITIONS (no slides)

27.	shower	30.	cage
28.	ceiling	31.	scar
29.	fail	32.	runway

A

APPENDIX B

Vocabulary Posttest, Examiner's Directions, and Answer Key

VOCABULARY POSTTEST

PART ONE

Instructions: Look at the slides, and listen to what the teachers says. Then circle the correct letter.

1.   A   B   C   D

2.   A   B   C   D

3.   A   B   C   D

4.   A   B   C   D

5.   A   B   C   D

6.   A   B   C   D

7.   A   B   C   D

8.   A   B   C   D

9.   A   B   C   D

10.   A   B   C   D

PART TWO

Instructions: Listen to the teacher's definition. Circle the letter for the word that has the same meaning.

11. a. crate   12. a. bruise   13. a. sniff

     b. dock   b. wrinkle   b. cough

     c. dam   c. nod   c. drizzle

     d. stripe   d. limp   d. bruise

B

14. a. kerchief

    b. cuff

    c. lapel

    d. cradle

15. a. cuff

    b. fangs

    c. cough

    d. shade

16. a. limp

    b. cough

    c. quarrel

    d. leak

17. a. nod

    b. wrinkle

    c. sniff

    d. quarrel

18. a. baker

    b. plumber

    c. mixer

    d. farmer

19. a. stripe

    b. baker

    c. wrinkle

    d. bruise

20. a. cradle

    b. threshold

    c. brick

    d. cupboard

PART THREE

Instructions: Look at the slides. Then, in the blank space below, write the name of the picture.

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

PART FOUR

Instructions: Listen to the teacher's definition. Then write the word that matches the definition.

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

POSTTEST

VOCABULARY

Examiner's Directions

PART ONE: MULTIPLE CHOICE SLIDES

I will show you some slides that have four pictures, just like the daily quizzes
you have taken. Each picture has a letter: A, B, C, or D. When I say a word,
look for the picture that matches the word. Then on your answer sheet, circle the
letter of that picture.

(SHOW THE SLIDES ONE AT A TIME, AT ROUGHLY FIVE SECOND INTERVALS, SAYING...)

1. Gems
2. Worm
3. Mug
4. Fur
5. twig

6. rope
7. mixer
8. web
9. tweezers
10. dove

PART TWO: RECOGNITION OF DEFINITIONS AND WORDS (no slides)

Now I want you to listen carefully. I will say the definition of a word. Then I
will say the four possible answers that are listed on your answer sheet. Listen to
all four possible answers. Then I will say the definition of the word again. You
will circle the letter on your answer sheet for the word that means the same.

11. A large box made of wood to protect things from being broken.

    A - crate; B - dock; C - dam; D - stripe.

    A large box made of wood to protect things from being broken.

B

12. When you walk unevenly. (DEMONSTRATE A LIMP)

    A - bruise; B - wrinkle; C - nod;   D - limp.

    When you walk unevenly. (DEMONSTRATE A LIMP)

13. Little noises you make with your nose. (DEMONSTRATE A SNIFF)

    A - sniff; B - cough; C - drizzle; D - bruise

    Little noises you make with your nose. (DEMONSTRATE A SNIFF)

14. The part of a coat near the shoulder that is turned back. (POINT TO LAPEL)

    A - kerchief; B - cuff;   C - lapel; D - cradle.

    The part of a coat near the shoulder that is turned back. (POINT TO LAPEL)

15. The long pointed teeth that animals have in the front of their mouths.

    A - cuff; B - fangs; C - cough; D - shade.

    The long pointed teeth that animals have in the front of their mouths.

16. A sound you make with your lungs and throat when you have a cold. (DEMONSTRATE COUGH

    A - limp; B - cough; C - quarrel; D - leak

    A sound you make with your lungs and throat when you have a cold. (DEMONSTRATE COUGH

17. When two people disagree or fight with words, they do this.

    A - nod; B - wrinkle; C - sniff; D - quarrel.

    When two people disagree or fight with words, tney do this.

18. A person whose job is to fix things like sinks, pipes, and toilets.

    A - baker; B - plumber; C - mixer; D - farmer.

8

19. The lines you get on your face when you grow older.

    A - stripe; B - baker; C - wrinkle; D - bruise.

    The lines you get on your face when you grow older.

20. A small bed that a baby sleeps in.

    A - cradle; B - threshold; C - brick; D - cupboard.

    A small bed that a baby sleeps in.

PART THREE: RECALL FROM SLIDES

Now I want you to look again at some slides. This time I want you to remember the name of the picture in the slide. I want you to write down the name of the picture on your paper. Spelling does not count, so spell the word as best you can. Guess if you do not know the word.

   (THE FOLLOWING SLIDES WILL BE SHOWN. YOU WILL SAY...)
NUMBER 21(pause, change slide), NUMBER 22 (pause, change slide), NUMBER 23 (pause, change slide), NUMBER 24 (pause, change slide), NUMBER 25 (pause, change slide), NUMBER 26 (pause, shut off machine).

PART FOUR: RECALL FROM DEFINITIONS (no slides)

Now the last thing I want you to do is remember the word that matches the definition I give you. Listen carefully to the definition I say, then try to think of the word that matches the definition. Remember, spelling does not count, so spell the words as best you can. Guess if you do not know the word.

27. A small object with wheels that is used to hold or move things.

     A small object with wheels that is used to hold or move things.

B

28. When a person suffocates or dies in the water.

    When a person suffocates or dies in the water.

29. When it rains very, very hard.

    When it rains very, very hard.

30. The dark spot you get on your skin where you have been hurt.

    The dark spot you get on your skin where you have been hurt.

31. The part of the entrance of a house that you step over when you come in.

    The part of the entrance of a house that you step over when you come in.

32. A woman whose husband has died.

    A woman whose husband has died.

VOCABULARY POSTTEST KEY

I. MULTIPLE CHOICE SLIDES

1.	C	6.	D
2.	A	7.	A
3.	B	8.	B
4.	D	9.	C
5.	C	10.	B

II. RECOGNITION OF WORDS BY DEFINITIONS (no slides)

11.	A	16.	B
12.	D	17.	D
13.	A	18.	B
14.	C	19.	C
15.	B	20.	A

III. RECALL FROM SLIDES

21.	appliances	24.	daffodil
22.	wave	25.	sill
23.	hose	26.	curb

IV. RECALL FROM DEFINITIONS (no slides)

27.	cart	30.	bruise
28.	drown	31.	threshold
29.	downpour	32.	widow

APPENDIX C

Listening Pretest and Posttest

Name: _____

Date: _____   School: _____

LEWIS AND CLARK

1. Lewis and Clark were sent West to

   (a.) Find out about the animals, people, and rivers.
   b. Conquer the area near the Pacific Ocean.
   c. Find out about the Indians.
   d. Test the ability of ordinary men.

2. The most important conclusion of the story on Lewis and Clark is that

   a. The Mississippi was finally reached successfully.
   b. Even explorers can get lost on expeditions.
   c. The dangers on the trip included cold weather and high mountains.
   (d.) Men of talent, curiosity, and courage can accomplish great things.

3. The major reason that Lewis and Clark worked well together was because

   a. They were old friends.
   (b.) Both men had important knowledge and skills for the trip.
   c. They took orders directly from the President.
   d. They had warm clothes and good climbing boots.

4. The order in which Lewis and Clark traveled across the country was

   a. Indian Falls-Pacific Ocean-St. Louis-Minnesota
   b. Rockies-Great Falls-St. Louis-Pacific Ocean
   (c.) St. Louis-Great Falls-Rockies-Pacific Ocean
   d. Rockies-St. Louis-Great Falls-Pacific Ocean

5. One way in which Lewis and Clark avoided getting lost was to

   (a.) Talk to the Indians about what they would find ahead.
   b. Look at a map to find rivers and mountains.
   c. Climb tall mountains so they could see ahead.
   d. Use the stars for direction.

6. The approximate date when Lewis and Clark reached the Pacific Ocean was

   a. 1605
   b. 1705
   (c.) 1805
   d. 1905

C

7. Clark was <u>outgoing</u>. The word <u>outgoing</u> means

    (a.) Friendly
    b. Adventurous
    c. A person that likes to be outdoors
    d. Happy

8. They came to a <u>fork</u> in the Missouri River. The word <u>fork</u> means

    a. Small river
    b. Turns of a river
    c. Waterfall in a river
    (d.) Division of a river

9. Lewis went down one branch and Clark went down the other. The word <u>branch</u> means

    a. Part of a tree
    b. High mountain
    (c.) Division of a river
    d. Dangerous path

10. How was the expedition of Lewis and Clark paid for?

    a. By the State of Louisiana.
    b. By a group of rich men.
    (c.) By the United States government.
    d. They paid for the trip themselves.

11. Identify each of the following sentences as a <u>main point</u> or a <u>detail</u> about the Lewis and Clark lecture. Mark one answer for each sentence below by circling <u>M</u> for "Main Point" and <u>D</u> for "Detail".

    (M) D   a. One danger they faced was weather.

    M (D)   b. They looked for the waterfalls the Indians talked of.

    M (D)   c. Lewis was a quiet, calm man.

C

(LISTENING POSTTEST)

CAPTAIN COOK

1. Captain Cook was sent to the South Pacific to

   (a.) See if there was a continent south of Australia other than Antarctica.
   b. Find the Hawaiian Islands and New Zealand.
   c. Find out if he could sail around Cape Horn.
   d. Make three voyages to the Cook Islands.

2. The most important idea in the story on Captain Cook is

   a. Cook knew mathematics and navigation well.
   b. Cape Horn was a dangerous area.
   (c.) Cook's discoveries helped us understand the Pacific.
   d. Cook was a humane man.

3. The major reason why Cook was a successful explorer was

   a. He was helped by friendly native people.
   b. He discovered Antarctica.
   c. He had good maps of the area.
   (d.) He was a man of intelligence, courage and humanity.

4. The approximate date when Cook made his expeditions was

   a. 1690
   (b.) 1770
   c. 1880
   d. 1910

5. Cook was sent on his expedition by

   (a.) The English Navy.
   b. Gilbert and Sullivan.
   c. The United States Navy.
   d. The Australian Navy.

6. Before Cook made his expedition, Europeans knew for sure that

   a. There was a Northwest Passage.
   (b.) There was an ice cap around the South Pole.
   c. The state of Oregon was on the coast of North America.
   d. Australia was the unknown southern land.

C

7. One way in which Cook was humane was that he

   a. Gave up his life fighting for his men.
   b. Was intelligent and understood navigation.
   (c.) Made sure his men did not get scurvy.
   d. Made friends with New Zealand natives.

8. Here is the very tip of South America. The word tip means:

   a. coast
   b. highest mountain
   (c.) end
   d. continent

9. On this voyage Cook proved there was not continent south of Australia. The word voyage means:

   a. ship
   (b.) trip
   c. attempt
   d. adventure

10. Some of the people on the island were hostile to Cook. The word hostile means:

    a. encouraging
    b. interesting
    c. strange
    (d.) unfriendly

11. Identify each of the following sentences as a main point or a detail about the expeditions of Captain Cook. Mark one answer for each sentence by circling the M for "Main Point" or the D for "Detail".

    M (D) a. Cook went as far as Alaska on his third voyage.

    M (D) b. Cook did not allow his men to fight with the native people.

    (M) D c. Cook explored and discovered new lands in the Pacific.

C

APPENDIX D

Topics for Speaking Pretest and Posttest

TOPICS FOR SPEAKING

1. The different sports of my country

2. My favorite school subject and why I like it

3. My favorite television program--the good and bad aspects of American television

4. A comparison of the family in my country and the family in the United States

5. What I like to do on the weekend and why

6. The major products of my country

7. The most interesting person I have ever met

8. Shopping in the United States--the good and bad aspects

9. An unusual place to visit--a description and reasons to visit

10. Two famous people--a comparison of good and bad aspects of each

D

APPENDIX E

Rating System for Speaking Samples:

Factor Definitions

FACTOR DEFINITIONS

DELIVERY

The volume and pace used to communicate ideas. Fluency, or ratio of spoken time to pause time is also a part of this factor. Access to the lexicon (words) and appropriate parsin (division) of syntactic parts are considered part of fluency. Flexibility, or the ability to recover quickly from performance problems, is included in the concept of fluency.

APPROPRIATENESS

The degree to which the style of task performance conforms to the expectations of the speech community. That is, the choice of words and the manner in which the report is delivered should conform to the task of giving a formal oral report to a class. For example, a "chatty" or informal conversational style is not appropriate for an oral report. Ending a report by saying "this is all" is inappropriate for a formal report. Certain expressions found in informal settings such as at a football game are also inappropriate.

ACCURACY

Phonological, syntactic, and semantic (grammatical) accuracy of utterances. This factor includes pronunciation of utterances, word order, word endings, and meanings of words.

ORGANIZATION

The logical progression of parts as they relate to the whole report. Each part must relate logically to the part that came before it, to the part that comes after it, and to the report as a whole. Taken as a whole, the report has a beginning, a middle, and an end.

APPENDIX F

Rating System for Speaking Samples:

Performance Standards

ABOUT THE FACTORS

Each of the factors will be judged according to a _performance standard_:
blocking, intrusive, acceptable, and successful.

BLOCKING: Performance on a given factor is such that communication
frequently comes to a halt.

INTRUSIVE: Performance is comprehensible but causes distraction or
annoyance to the listener.

ACCEPTABLE: Performance is satisfactory but noticeably imperfect.

SUCCESSFUL: Performance is more than satisfactory, enabling the
subject to succeed fully at the task.

Note that the standard is defined differently for each factor:

DELIVERY

Blocking: Delivery is so halting and filled with pauses that
the listener cannot follow the report. Delivery can
also be so inaudible or monotonic that the listener
cannot comprehend the report or loses interest in
trying to comprehend.

Intrusive: Delivery is somewhat halting causing irritation to the
listener, but not preventing comprehension of the report.

Acceptable: Delivery has not significant impediment or enhancement
of effectiveness.

Successful: Delivery enhances the overall effectiveness of the report.
The report is easy to listen to and follow.

APPROPRIATENESS

Blocking: Choice of words and tyle prevent communication from
occurring. Examples:

.inappropriate or missing announcement of topic of
report so that listener does not know topic.

F

.no ending, a long silence is followed by the monitor's saying "Is that all?"

.inappropriate register, speaking informally to one person so that listener becomes confused.

Intrusive: Choice of words and style cause irritation to the listener, but otherwise do not prevent communication. Examples:

.inappropriate use of informal expressions such as "you know: or "that guy."

.inappropriate ending such as "that's all" or "I finish."

Acceptable: Choice of words and style does not prevent or enhance communication. Example: announcement of topic: My topic is...

Successful: Choice of words and style contribute significantly to the communication of ideas. Example: announcement of topic: I am going to talk about....

ORGANIZATION

Blocking: Organization is so confusing or nonexistant that listener does not capture topic or any ideas. Utterances are strung together reflecting little or no planning.

Intrusive: Organization is at a bare minimum. The listener has to infer subordination of ideas. Lack of ending causes listener to feel that the report is incomplete.

Acceptable: Loose structure does not prevent identification of ideas but does not enhance overall communication.

Successful: Organization considerably enhances identification of parts and ideas. The listener follows the report easily.

ACCURACY

Blocking: Pronunciation, grammatical structure, or word usage is so inaccurate that all comprehension of the report is lost.

Intrusive: Pronunciation, grammar, or word usage is inaccurate to the point that the listener can infer meaning, but is distracted by the mistakes.

Acceptable: Pronunciation, grammar, or word usage is somewhat
inaccurate, but does not interfere with overall
meaning.

Successful: Pronunciation, grammar, or word usage is quite accurate
and enhances comprehension of the message.

APPENDIX G

Rating System for Speaking Samples:

Level Definitions

LEVEL DEFINITIONS

LEVEL 1

The speaker at this level is generally not comprehensible. Only an occasional word is understood. The topic of the report is not stated or is incomprehensible and must be inferred from the comprehensible parts of the report. This speaker is very hesitant, searching for words or producing only occasional strings of words followed by long pauses which makes the report hard to understand or follow. Mistakes make comprehension of the report almost impossible. If at all comprehensible, this speaker tends to string utterances together with no plan in mind. Utterances are often connected by "and" and are often appended as "afterthoughts."

This speaker has little confidence as evidenced by inaudibility or a tendency to "trail off" at the end of the report. Very often the end of the report is not known or comes as a surprise to the listener. The listener is left with a feeling that the report is incomplete or that the speaker wanted to say more than he/she was able to.

LEVEL 1+

The speaker at this level exceeds a 1-level speaker in that this speaker is slightly more comprehensible and produces longer utterances. While this speaker may be more accurate than a 1-level speaker, he/she is still inaudible and, therefore, incomprehensible. The voice of this speaker is often monotonic, making it hard for the listener to follow.

LEVEL 2

The speaker at this level is generally comprehensible and audible. Enough of the report is understood so that incomprehensible parts can easily be inferred. Mistakes are at times bothersome, but not enough to prevent the listener's understanding of the ideas. The topic of the report is clearly stated or easily inferred from the first few utterances. The speaker is fairly fluent with few pauses to find words. Pauses are filled with appropriate utterances and the speaker is able to hold the listener's interest.

This speaker has some organization in the report in that he/she informs the listener of the topic and proceeds to give information about the topic. While the information is usually rich in detail, it is not structured. For example, important points and less important points are not clearly indicated. Very often there is no "end" to the report and the student indicates that he/she is finished by saying "and that's all" or "that's all I have to say." However, in contrast to lower levels of proficiency, the speaker appears to say all that he/she intended to say. The choice of words of the speaker may at times be inappropriate. For example, the "tone" of the report may become "chatty" and sound like an informal conversation rather than a formal report. The speaker may begin to sound as if he/she were speaking to one person rather than to a group.

G

LEVEL 2+

This speaker exceeds the 2-level speaker in that more organization is exhibited. Parts of the report are clearly subordinated and/or follow in logical or chronological order. A clear end, however, may still be lacking at this level. A speaker at this level still lacks the accuracy, clarity, and completeness found at the 3-level.

LEVEL 3

The speaker at this level is completely comprehensible and audible. Accuracy is high with only occasional acceptable mistakes being committed. The speaker is very fluent and exhibits confidence in his/her delivery as evidenced by the pace and volume of the report, and the ability to hold the listener's interest. The report is well organized in that the listener immediately knows the topic of the report and the most important ideas. Parts of the report are clearly indicated and appropriately subordinated. For example, the speaker clearly indicates main points, examples, and transitions. The "end" of the report is also clearly indicated. Even though the report may not be lengthy, the listener feels that the speaker has said all that he/she intended to say and that the report sounds "complete" and logically organized. Choice of words is appropriate for a formal academic oral report at the high school level. The performance of this speaker approaches that of a native speaker of the same age giving an oral report in an English class, although it may not have the length and richness of detail found in the native speaker's report.

APPENDIX H

Rating System for Speaking Samples:

Rating Sheet

RATING SHEET

RATER _____

TAPE NUMBER _____   SUBJECT NUMBER _____

LEVEL_____

FACTORS

STANDARD

	BLOCKING	INTRUSIVE	ACCEPTABLE	SUCCESSFUL
COMPREHENSION				
STRUC PRECISION				
DISCOURSE COMP				
LEXICALIZATION				
FLUENCY				

NOTES:

H

APPENDIX I

Rating System for Speaking Samples:

Instructions to Raters

INSTRUCTIONS TO RATERS

1. Fill in tape number and subject number that is on the outside of
   the tape for each subject.

2. Listen to the tape once. Estimate a level for that subject. You
   may want to take notes as you listen.

3. Listen to the tape again and fill in the performance standard for
   each factor. Play the tape again if necessary to determine this.

4. Look at the level you have written on the sheet to see if the
   score agrees with the factor ratings. If it does not, then adjust
   the score.

5. If a score is difficult to determine, than calibrate it with pre-
   scored tapes and reread the level definitions. Take notes on
   tapes that are difficult to evaluate so that you can discuss your
   reasons later.

APPENDIX J

Language Learning Strategies Inventory

and

LLSI Strategy Interpretation Key

LEARNING ENGLISH AS A SECOND LANGUAGE

Student Questionnaire

Instructions

We want to ask about some things that help you learn English as a second language. Students sometimes have special ways of studying, speaking to others, or listening that help them in learning how to speak and understand English. We want to know if you did some of these things in the last two weeks.

On the following pages you will find 42 statements about learning a second language. Please read each statement. Then circle one letter (A to D) that tells if the statement was true of you in the last two weeks.

        A.   Never true of you in the last two weeks
        B.   Sometimes true of you in the last two weeks
        C.   Usually true of you in the last two weeks
        D.   Always true of you in the last two weeks

There are no right or wrong answers. Try to rate yourself on what you actually did in the last two weeks. Please work as quickly as you can without being careless, and complete all items.

Example

This example will show how to mark the questions on the following pages.
Read the example and draw a circle around the letter that tells what you did in the last two weeks.

Never	Sometimes	Usually	Always
A	B	C	D

I translate what I hear in English into my own language so I can be sure to understand it.

In the last two weeks, if you only did this sometimes, draw a circle around the letter B. but if you did it usually, draw a circle around the letter C. Use the other letters if you did it never or always. Remember, draw a circle around the letter that tells what you actually did in the last two weeks.

J

Name: _____ _____ Age:___

School: _____ Date: _____

Remember to draw a circle around the letter that tells what you <u>actually did</u> in the last two weeks.

Never	Sometimes	Usually	Always		
A	B	C	D	1.	When I have a long vocabulary list, I break it up into parts. Than I try to learn one part before going to the next.
A	B	C	D .	2.	I make a picture in my head of what a word represents so that I can remember its meaning.
A	B	C	D	3.	I remember new words because I can hear in my mind how they are pronounced.
A	B	C	D	4.	After I study, I know if I studied well because I look back to see if I met my goals for learning.
A	B	C	D	5.	When I don't know what a word means, I use the rest of the sentence to help me understand.
A	B	C	D	6.	When I listen to the teacher, I write down the main ideas and important points.
A	B	C	D	7.	I listen most for names and dates when the teacher talks about history.
A	B	C	D	8.	If I have to give a talk to the class, I give it to a friend first so he or she can tell me how it sounds.
A	B	C	D	9.	I say the same kind of things in English as I did in my own language when I meet a new person.
A	B	C	D	10.	I try to plan what kinds of things to say in a conversation.
A	B	C	D	11.	At parties and other social events, I talk to people who speak my own language.
A	B	C	D	12.	I don't correct myself when I make a mistake in talking because the other person will get the idea anyway.
A	B	C	D	13.	When I hear new information, I try to connect it to what I already know.
A	B	C	D	14.	When I want to learn new words in English, I make up a sentence for each one.

J

Never	Sometimes	Usually	Always		
A	B	C	D	15.	I try to divide what I am studing into parts, and remember something important about each part.
A	B	C	D	16.	I think about myself doing the action that a new word describes.
A	B	C	D	17.	Music helps me remember new words because I can say the words to the music.
A	B	C	D	18.	I remember things I say in English and look back at what my mistakes were.
A	B	C	D	19.	When people speak too fast for me, I look for single words that help me understand what they are saying.
A	B	C	D	20.	I do not take notes when the teacher gives directions.
A	B	C	D	21.	When I listen to the teacher, I listen carefully for words she repeats or stresses.
A	B	C	D	22.	I ask people who speak English well to help me practic
A	B	C	D	23.	I make use of words or parts of words that are similar in English and in my own language in order to learn their meanings.
A	B	C	D	24.	After I think about what might happen in a conversatior I find out if I know the English for what I want to sa'
A	B	C	D	25.	I go to movies or watch TV so I can learn English.
A	B	C	D	26.	I listen carefully to my own Pronuncation and try to correct it as I am talking.
A	B	C	D	27.	I think about how to apply new things that I hear to my everyday life.
A	B	C	D	28.	When I hear a new sentence, I try to think of a conversation in which I can use it.
A	B	C	D	29.	When I have a long vocabulary list, I divide it up into parts, and give each part a name that has special meaning.
A	B	C	D	30.	I try to imagine new words in a special situation or setting.
A	B	C	D	31.	In order to remember how to say a word, I think of a word that sounds like it.

J

A   B   C   D   32.   I keep a diary or a journal in which I record my experiences learning English.

A   B   C   D   33.   When I don't understand a person, I think about where we are and what we are doing, and this helps me understand.

A   B   C   D   34.   I do not write down most new words because I won't hear them again anyway.

A   B   C   D   35.   When I hear a story, I listen for the beginning, middle and end.

A   B   C   D   36.   I ask my friends to comment on my English.

A   B   C   D   37.   What I already know in my own language helps me understand what the teacher is saying in English.

A   B   C   D   38.   If I have to give a talk to the class, I plan to say things in the right order and stress things that are important.

A   B   C   D   39.   I try to make friends with people who speak English to me.

A   B   C   D   40.   If I make a mistake in grammar, I stop and correct what I said.

A   B   C   D   41.   I try to connect what I am hearing in a lecture to my own experiences.

A   B   C   D   42.   I try to use words in a conversation as soon as I learn them.

Language Learning Background and Attitudes

Please answer the following questions to the best of your ability. Mark only one choice per question.

1. How long have you been living in the United States?

    ___ 0 through 1 year

    ___ 2 through 5 years

    ___ 6 years or more

2. How many years did your mother go to school?

    ___ Did not go to school

    ___ 1-8 years

    ___ 9-11 years

    ___ Graduated from high school or secondary school

    ___ Went to or graduated from college or university

    ___ Don't know

3. How many years did your father go to school?

    ___ Did not go to school

    ___ 1-8 years

    ___ 9-11 years

    ___ Graduated from high school or secondary school

    ___ Went to or graduated from college or university

    ___ Don't know

J

4. What was the last job your father had before you left your own country? If your father did not live with your family, answer for the oldest person in the family who gave money for food, clothes, or to pay for the house. Choose one that describes the job the best.

___ Farm laborer

___ Fisherman

___ Other laborer such as washes dishes or cleans office buildings or homes

___ Secretary/typist (bookkeeper, accountant, bank clerk)

___ Military or policeman

___ Farm owner or manager

___ Craftsman (carpenter, plumber, painter, fixes cars)

___ Businessman (owns a business, manages a business or sells business products)

___ Professional (doctor, lawyer, scientist, teacher)

___ Never worked

___ Don't know

J

Read each of the following reasons for learning English. Circle the one letter (A to D) that tells if the statement is:

A. Not at all my reason for learning English

B. Sometimes my reason for learning English

C. Usually my reason for learning English

D. Always my reason for learning English

Reasons for Learning English

A   B   C   D   1. Learning English will help me to understand Americans and their way of life.

A   B   C   D   2. Learning English will help me to make good friends among Americans.

A   B   C   D   3. Learning English will help me to think and act like Americans.

A   B   C   D   4. Learning English will help me meet and talk to more different kinds of people.

A   B   C   D   5. Learning English will be useful in getting a job.

A   B   C   D   6. I need to learn English because people respect you more if you know at least two languages.

A   B   C   D   7. I feel that no one is really educated unless they know at least two languages.

A   B   C   D   8. I need to learn English in order to finish high school.

THANK YOU

J

LLSI Strategy Interpretation Key

LSI Strategy Name	Strategy Type	Strategy Definition	Use in Training	LSI Items
Self-evaluation	Metacognitive	Checking the outcome of one's own language learning against an internal measure of completeness and accuracy.	Used in vocabulary activities in meta-cognitive group	4,18,32
Selective Attention	Metacognitive	Deciding in advance to attend to specific aspects of language input or situational details that will cue the retention of language input.	Used in listening activities in meta-cognitive group	7,21,35
Functional Planning	Metacognitive	Hypothesizing, identifying, and organizing the language functions necessary to carry out an upcoming language task.	Used in speaking activities in meta-cognitive group	10,24,38
Self-management	Metacognitive	Understanding the conditions that help one learn and arranging for the presence of those conditions.	Not used in training	11*,25,39
Self-monitoring	Metacognitive	Correcting one's speech for accuracy in pronunciation, grammar, vocabulary, or for appropriateness related to the setting or to the people who are present.	Not used in training	12*,26,40
Grouping	Cognitive	Reordering or reclassifying and perhaps labeling the material to be learned based on common attributes.	Used in vocabulary activities in meta-cognitive and cognitive groups.	1,15,29
Imagery	Cognitive	Relating new information to visual concepts in memory via familiar, easily retrievable visualizations, phrases, or locations.	Used in vocabulary activities in meta-cognitive and cognitive groups.	2,16,30
Auditory Representation	Cognitive	Retention of the sound or similar sound for a word, phrase, or longer language sequence.	Not used in training.	3,17,31

* Reversed items

LLSI Strategy Interpretation Key

LSI Strategy Name	Strategy Type	Strategy Definition	Use in Training	LSI Items
Inferencing	Cognitive	Using available information to guess meanings of new items, predict outcomes, or fill in missing information.	Not used in training.	5,19,33
Note-taking	Cognitive	Writing down the main idea, important points, outline, or summary of information presented orally or in writing.	Used in listening activities in metacognitive and cognitive groups.	6,20*,34*
Transfer	Cognitive	Using previously acquired linguistic and/or conceptual knowledge to facilitate a new language learning task.	Not used in training.	9,23,37
Elaboration	Cognitive	Relating new information to other concepts in memory.	Not used in training.	13,27,41
Contextualization	Cognitive	Placing a word or phrase in a meaningful language sequence.	Not used in training.	14,28,42
Cooperation	Social mediating	Working with one or more peers to obtain feedback, pool information, or model a language activity.	Used in listening and speaking activities in metacognitive and cognitive groups.	8,22,36

* Reversed items.

SCORING KEY FOR ITEMS 1-42

A=1; B=2; C=3; D=4
unless item is reversed.

Reversed items are scored:
A=4; B=3; C=2; D=1

LLSI STRATEGY INTERPRETATION KEY

Reasons for Learning English

Questions 1-4 relate to an Integrative orientation for learning English. Questions 5-8 relate to an Instrumental orientation (Gardner and Lambert, 1972).

Scoring is as follows:

A=1; B=2; C=3; D=4

The total possible score on either orientation is equal to 16.

Language Learning Background and Attitudes

The four questions in this section of the LLSI collected basic demographic information about the students. It was not "scored" or Interpreted as evidence of learning strategy use.

APPENDIX K

List of Vocabulary, Definitions, and

Method of Presentation

(All Groups)

LIST OF VOCABULARY WORDS
USED IN TRAINING

Word	Definition	Method of Presentation
appliances	Appliances are electric machines used in the kitchen.	Slide
awkward	You are awkward when you are clumsy and find it hard to play sports or dance.	Definition
baker	A person who makes bread and sells it.	Definition
basin	A basin is a bowl with sloping sides that is usually used for holding water for washing.	Definition
blizzard	A blizzard is when it snows very hard and the wind blows.	Definition
blossoms	Blossoms are young flowers.	Slide
brick	A clay block used in making a building or a wall.	Slide
bruise	The dark spot that appears on your skin where you have been hurt.	Definition
bulb	A bulb is a round object used to give electric light.	Slide
cart	A cart is a small object with wheels and is used to hold or move things.	Definition
cheapskate	A cheapskate is someone who does not like to spend money.	Definition
cork	A cork is a stopper for a bottle.	Slide
cough	A sound you make with your lungs and throat when you have a cold.	Definition
cradle	A cradle is a small bed that a baby sleeps in.	Definition
crate	A crate is a large box made of wood.	Definition
cuff	A cuff is the part of the shirt or pants leg that is folded at the end.	Definition

K

LIST OF VOCABULARY WORDS
USED IN TRAINING

Word	Definition	Method of Presentation
cufflinks	Cufflinks are buttons you put on shirts every time you wear them.	Slide
cupboard	A cupboard is where you keep dishes, glasses, or food.	Slide
curb	The concrete edge where the street meets the side of the road.	Slide
cushion	A cushion is a pillow or soft pad that you sit on, kneel on, or put your head on.	Slide
daffodil	A yellow flower with a large petal like a trumpet.	Slide
dam	A dam is a wall that men build to hold back moving water such as a river.	Slide
dock	A dock is where boats are tied up.	Slide
dove	A dove is a white bird that makes a cooing sound.	Slide
downpour	A downpour is when it rains very, very hard.	Definition
drizzle	A drizzle is when rain is very fine and light.	Definition
drown	When a person suffocates or dies in the water, he drowns.	Definition
fangs	Fangs are the long pointed teeth that animals have in the front of their mouths.	Definition
farmer	A person whose job is to grow food and take care of animals.	Definition
fisherman	A person who catches fish out of a river or the sea.	Definition
flock	A flock is a group of birds or animals.	Slide
fur	The hair of an animal.	Slide
gems	Gems are jewels such as diamonds or amethysts.	Slide

K

LIST OF VOCABULARY WORDS
USED IN TRAINING

Word	Definition	Method of Presentation
hairpin	A pin to hold the hair in place.	Slide
headlights	Headlights are the lights on the front of the car.	Slide
hedge	A hedge is a row of bushes or short trees.	Slide
hose	A hose is a tube that carries water.	Slide
ivy	A vine or plant that climbs.	Slide
kerchief	A kerchief is a square of cloth used as a head covering or worn around the neck.	Slide
kettle	A kettle is used for boiling water.	Slide
knot	A knot is the tied part of a string.	Slide
lapel	A lapel is the part of the coat near the shoulder that is turned back.	Definition
leak	When you have a leak in your roof, water comes in when it rains.	Definition
limp	When you walk unevenly, you limp.	Definition
mixer	A mixer is a machine in the kitchen that stirs food.	Slide
mug	A mug is a large round cup for drinking.	Slide
nod	When someone moves his head down.	Definition
oar	A flat piece of wood used to make a boat move.	Slide
path	A path is a narrow place to walk.	Slide
pickle	A pickle is green and tastes of vinegar.	Slide
plumber	A plumber is a person whose job is to fix things like sinks, pipes, and toilets.	Definition
propeller	Part of a boat or airplane that has arms which turn around like a fan.	Slide

LIST OF VOCABULARY WORDS
USED IN TRAINING

Word	Definition	Method of Presentation
quarrel	When two people disagree or fight with words, they quarrel.	Definition
rattle	A rattle is a baby's toy that makes a noise when you shake it.	Slide
rope	A thick cord used to tie large or heavy objects.	Slide
shade	When you are in the shade, it is when you are protected from direct sunlight.	Definition
shore	The land along the edge of the sea or a lake.	Slide
sill	A sill is the flat piece of wood at the bottom of a window.	Slide
skillet	A skillet is used for frying food.	Slide
sniff	Little noises you make with your nose.	Definition
stripe	A stripe is a design of straight lines made of different colors.	Slide
threshold	The threshold of a house is part of its entrance.	Definition
tweezers	Small instruments used to pick up very small objects or pull out hairs.	Slide
twig	A small, thin branch of a tree.	Slide
wave	A wave is made when the water comes up or goes down on the ocean or on a lake.	Slide
web	A web is made by a spider in order to catch flies.	Slide
widow	A widow is a woman whose husband has died.	Definition
wiper	A wiper is something on cars that is used to clean the rain from the windshield.	Slide

LIST OF VOCABULARY WORDS
USED IN TRAINING

Word	Definition	Method of Presentation
worm	A worm is a small animal that lives in the ground and looks like a very small snake.	Slide
wrinkle	Wrinkles are the lines you get on your face when you grow older.	Definition

APPENDIX L

Teacher's Script for Instruction

in

Imagery and Grouping

(Metacognitive and Cognitive Groups)

SERIES: DAY 4

ACTIVITY: 2 VOCABULARY INSTRUCTIONS

TIME: 15 Minutes

GROUP: METACOGNITIVE/COGNITIVE

SCRIPT:

One way to learn vocabulary is to group together words or expressions
that have something in common. For example, here is a list with the
words table, dishes, sink, refrigerator. Do you know these words?
(If not, T explains). You know that they are things found in the kitchen
so you can group them under the title "kitchen" like this: (T writes on
board). The words swim, run, throw and jump also appear on the list and you
can group them together under what title? (T elicits from class) What do
they have in common? (That's right) They are actions found in sports.
Which other words might go together that are on the list? What title can
you give these groups? (Use board) (Third list that appears on hand out).

O.K. Fine. Now how will we remember the groups of words and their
meanings? Well, one way is to close your eyes and imagine a kitchen.
Now everyone close (their) eyes and imagine a kitchen. It can be any
kitchen. The kitchen at home, or a your grandparents' house or a friend's
kitchen. Can you see it? Now look at the words for a few seconds and close
your eyes again. Imagine the table (pause), the sink (pause) and now the
dishes in the sink (pause), then the refrigerator (pause). Can you see
each thing clearly? What color are they? (Elicit) Describe your kitchen
(Juan). O.K.

Now you have two ways of studying a long list of words. One is to group
the words that have something in common and the other is to imagine these
objects together in some place or situation. Now let's imagine the other
set. Swim, run, jump, and throw. Let's imagine the Olympic Games. Close
your eyes and try to imagine a person swimming in a large swimming pool.
Now imagine a track with someone running. Now a person jumping far. Now
a person throwing a ball. Now picture each person again. (Erase words
from blackboard) Now try to remember what words were in that group. Use
the picture in your mind to help you remember. (Elicit words) Which
words were in the first group? (Elicit) What was the title? (If time,
elicit other groups and titles).

VOCABULARY

Trial List of Words

    table
    dishes
    sink
    refrigerator

    swim
    run
    throw
    jump

GROUP 1   GROUP 2

    base
    bank
    money
    bat
    account
    homerun
    check   TITLE 1   TITLE 2
    foul
    team
    savings

L

SERIES: DAY 4

ACTIVITY: 3 VOCABULARY PRESENTATION

TIME: 10 Minutes

GROUP: METACOGNITIVE/COGNITIVE

SCRIPT:

O.K. Now we'll have 20 new words. I will give you a little booklet of
words with their definitions like this one. You will tear off a word as
I read it and put a little glue on the back like this. Then you
immediately put the word into one of the groups that you have on this page
(T hands out grouping page and booklets).

(Read titles).

After you have grouped the words you have only 4 minutes to study the
groups. Remember to imagine the words in each group just as we did
earlier with the groups. Try to think of characteristics that the words
share with each other to group the words. Then think of the pictures
created by each word. Put each word into one group only. Are there any
questions? Let's begin.

(After presentation T circulates to make sure that Ss are studying groups
and imagining items.)

L

APPENDIX M

Teacher's Script for Instruction

in Self-Evaluation

(Metacognitive Group)

SERIES: DAY 4

ACTIVITY: 6 VOCABULARY - SELF EVALUATION JOURNALS

TIME: 2 Minutes

GROUP: METACOGNITIVE

SCRIPT:

Now, as we go through each vocabulary exercise, I will give you a minute
or two to write something in your journals. (T hands out journals).
In these Journals you are to make notes on your progress. You can write
down anything you want to write regarding your progress in learning the
vocabulary.

Today, I would like you to answer these questions in your journals.
(Put on board).

1. Write down the number of words that you learned today

2. Write the words that were difficult for you

3. Write the method you used to remember the words (grouping,
   pictures, etc.)

4. Write one sentence about your progress in vocabulary.

Be sure that you write about your progress in the area of vocabulary.
I will give you a minute or so each day after you have completed the
short vocabulary quiz. The quizzes are for you to evaluate your own
progress only.

M

APPENDIX N

Teacher's Script for Control Group Instruction

in Vocabulary

Vocabulary Questions for Control Group

DAY 4

ACTIVITY: Vocabulary Instruction

TIME: 3 minutes

GROUP: Control

Today we are going to begin the third activity we will do together. This will be vocabulary. I want to give you a list of new words, words you don't know. I will show you a picture of some of the words. I will also tell you what some of the words mean. You are to learn them. You can learn them in any way you want. Do whatever you usually do to learn new words. I'm going to walk around and see what you do. I may ask you questions because I am interested in how you learn new words. The important thing is to be natural. Do whatever you normally do to learn vocabulary. Remember that what you tell us about learning English is very useful information. You are giving us new information that will help other students like yourselves.

O.K. Now for the new words. Have you ever heard the saying that "a picture is worth a thousand words?" I am going to show you some slides, or pictures, of what these words represent. However, some of the words do not have a picture. For these words, I will tell you what they mean. I will also give you a list of the words so you can see the definitions and how the words are spelled.

Then you will have several minutes to study the words and learn their meanings. You can learn the words in whatever way you want. I am not going to tell you how to learn them. I want to see how you learn new words. So remember, be natural and learn them as you usually learn new words. You can do anything you want.

Afterwards, I will give you a quiz to see if you learned the words. Ready to begin?

N

DAY 4

ACTIVITY: Questions on vocabulary

TIME: 5 minutes

GROUP: Control

Now I want to ask you some questions. Since I cannot talk to each of you
individually -- there is not enough time -- I'd like you to answer these questions
in writing. These questions are about learning vocabulary words in English.
I want you to answer these questions carefully.

Think about how you learn vocabulary. Think about what is hard to learn and
what is easy. These are not yes or no questions, they are questions you have
to answer with a sentence or two. Don't worry about spelling or grammar --
I'm interested in what you think and what is true for you. In other words,
your ideas. This is not a quiz or test. I just want to know more about how
you learn new words in English.

O.K. Here are the questions. If you don't understand any words, please ask
me and I'll explain. (T hands out list of questions)

(WITH REMAINING TIME YOU CAN HAVE CONTROL GROUP WORK ON THE READING EXERCISES)

N

VOCABULARY

DAY 4

Name: _____   School: _____

                                          Date: _____

Please complete the following sentences.

1. When I first heard today's vocabulary words, I tried to understand them

    by _____

    _____

    _____.

2. In order to remember these new words, I _____

    _____

    _____.

3. The way I studied for today's vocabulary test was to _____

    _____

    _____.

4. In the future, I plan to remember today's new vocabulary words by _____

    _____

    _____.

5. Which vocabulary words were easiest to remember, the ones with the pictures or
    the ones with definitions? _____.

    Why? _____

    _____

N

APPENDIX O

Teacher's Script for Instruction

in

Selective Attention, Note-taking, and Cooperation

(Metacognitive Group)

SERIES: Day 2

ACTIVITY: 2 LISTENING AND NOTETAKING INSTRUCTION

TIME: 20 Minutes

GROUP: METACOGNITIVE

SCRIPT:

The next activity involves learning ways to listen and understand
a lecture. In the days that you are here you will listen to
four lectures on four different topics. One of the lectures will
be on an animal, another on a current social issue, one on
geography, and finally one on the life of an interesting person.
We have chosen topics that are underlined or different to give
you an opportunity to apply the new skills in different situations.
This way, you can use these skills in your science class, your
chemistry class, your history class, and in your literature
(English) classes.

Before listening to a short lecture, however, we will talk about
taking notes (and important things to pay attention to when you
hear a lecture in school or watch a T.V. program).

First, I'll review the reasons why we take notes, second, tell you
about one way you can take notes, third, explain how to take
notes (and finally, how to recognize parts of a lecture).

Now, notetaking is very useful for two reasons. One is that it
helps you follow and actively organize what you hear. While you
are listening to a lecture you decide which points are important
points and which points are details or examples. The second
reason is that notetaking helps you remember what was said AFTER
the lecture is over. So notetaking is important for (1) .
understanding a lecture, and (2) remembering a lecture.

O.K. Here is one way to take notes. One way is to list things
as you hear them. This is a list. This is just a list of points.
We don't know which points are the important points, which are
general and which are specific (see following page).

Now look at this (handout). This is a T-List. Notice a big T on
the paper. What is on the left side? (Elicit) Right. The
important or main points. What is on the right side? (Elicit)
Right. The generalizations or examples, and the details.

Now, how do you take notes? (Elicit) O.K. First, you concentrate
on the main ideas. With the T-List method, where do you write
the main ideas? Right. On the left. Why do you want to

0

TAKING NOTES

it's useful
understand and remember lecture
2 ways to take notes
lists and outlines

how to take notes
concentrate on principle ideas
show importance
write short phrases
reorganize notes

how to organize
use parts of lecture
introduction
main body
points repeated
examples
conclusion
summary
implications

special phrases that indicate parts of lecture

TAKING NOTES

T LIST

TAKING NOTES

usefulness	understand, remember lecture
ways to take notes	lists outlines
how to take notes	get main ideas show importance of parts write short phrases reorganize notes <u>after</u> lecture

separate the main ideas? Right, You can indicate the relative
importance of parts of the lecture. This helps you organize your
thoughts. Now. This brings us to the third point. Do you
write everything that the lecturer says? No. You write short
phrases in your own words, or just ENOUGH to help you remember
what was said. If you write too much you miss the next thing
that the person says. If you write too little, you won't remember
what was said. So, remember to write short phrases. (Here write
whole sentences on board and elicit from class key items--
erase that rest to illustrate what key words are.)

Let's say that you don't have time to indicate important points
and you write a list of facts from the lecture, what do you do
with this list? (Elicit) O.K. You can reorganize the facts so
that the main points are on the left and the details and examples
are on the right, Somtimes it's difficult to decide which points
are the main points during the lecture. In this case you have
to take a few minutes right after the lecture to decide which
points are important. You might want to add your own inter-
pretations of some points as well.

So, to summarize how to take notes, (1) you concentrate on main
ideas, (2) try to show the relative importance of points by
the T-List method, (3) write short clear phrases or key words
and (4) reorganize your notes right after the lecture.

Now we come to the third important point about notetaking. How
do you recognize a main point? Well, you can listen for certain
expressions that signal or indicate to you that this is a main
point.

Now, an important thing about lectures is that there are expressions
you can listen for that will tell you when something is a main
point, or an example, or a detail. What are some of these expres-
sions? (Elicit--list on board) Now here's a list of those
expressions, (T reads each on list--makes sure that students
understand each and how each expression signals a point.)

(With this, introduce parts of a lecture: introduction, body, and
conclusion.) So there is one thing to help you organize your notes.
You recognize expressions that indicate or signal main points
and details.

To summarize what I have said, notetaking is helpful for
understanding a lecture and for remembering a lecture. Two
possible ways of taking notes are (1) lists and (2) T-Lists.
The way to take notes is to (1) concentrate on main ideas, (2) show
the relative importance of parts, (3) write only key phrases
and words and (4) reorganize the notes after the lecture.

0

One way to organize notes is to pay attention to phrases that
signal main points, details, and the structure of the lecture.

In conclusion, it is evident that notes that are well organized
will help you to understand and remember more of a lecture.
Not only do you have something to look at to help you remember,
but you also are more familiar with the material because you have
organized it yourself.

SERIES: Day _2_

ACTIVITY: 3   TRIAL LISTENING LECTURE

TIME: 5 minutes

GROUP: METACOGNITIVE

SCRIPT:

Now that you know something about notetaking we're going to
practice by taking notes during a short lecture. The lecture is
five minutes long and is about a famous river in another country.

What famous river do you know about? (Elicit) Do you know any
famous American rivers? (Elicit) The river we're going to
hear about is the Thames River. Here is a practice T-List to help
you follow.

Now listen closely to the instructions:

1. You are to follow the lecture by reading what is on the T-List

2. Fill in the blanks when you hear the missing information

(T plays tape and gives students a minute to look over notes
after tape is over. T plays tape again and stops after
introduction. T elicits markers and main points and checks notes
asking individual students what they wrote into the blanks.
T supplies coaching as needed.)

Now that you have taken some notes, did you notice that it
helped you to understand and remember the main points? Now
without looking at your T-List, what were the three main points?
Can you remember any details? (Elicit)

Now in a few days you will listen to a lecture, takes notes,
and then have a short quiz to see how much you understand
and remember. You will be given a short quiz after you listen
to the lecture. These quizzes are for you to check your own
progress.

0

SERIES: DAY <u>2</u>

ACTIVITY: 4 STUDY COOPERATION

TIME: 5 Minutes

GROUP: METACOGNITIVE/COGNITIVE

SCRIPT:

Now you will study in small groups. I want you to compare your notes
and get as many facts as you can on the lecture. Remember, you are
responsible for helping each other to understand the lecture
as well as possible. Compare your notes for a few minutes
and discuss any points that you did not understand well. Then
look over your T-List for a few minutes before we take the listening
comprehension test. This time I will play the tape once more
before we take the test. You can check your notes against the
tape. See if your notes are accurate and if your impressions
are correct. Remember to concentrate on separating the main
ideas and details. Listen for those special expressions to
help you decide which are main ideas and which are details or
examples.

(REWIND TAPE)

LECTURE REPETITION   (5 minutes)

STUDY COOPERATION   (5 minutes)

LISTENING TEST   (6 minutes)

0

TEACHER KEY TO TRIAL LECTURE

THE RIVER THAMES

Basic facts	Location Southern England (off coast of Europe)
	Length 236 miles long
Usefulness	Industry
	- boats moving cargo (materials)
	- ship industry (clipper ships)
	Tourism
	- boat races
	- theater (cultural events)
	Source of water (for 12 million people
Problems	Control of flow
	- system of weirs (to control water)
	- 1400 million gallons a day
	Purity of water
	- pollution from industry
	- clean up program, fish appear again

APPENDIX P

List of Markers Used in Speaking Activities

(Metacognitive Group)

MARKERS

INTRODUCTION

To introduce the topic of the report:

Today, I'm going to tell you about
I would like to tell you about
I would like to report on
This report is about

To summarize the points of the report in the introduction:

First, I'll tell you about.... Second,...
I will speak on three main points. They are...
First of all, I will report on.... Second, ...

BODY

To introduce main points:

The first thing is... Another thing is...
The first important point is.... The second thing is...

Now we come to the second important point...
This brings us to the second important point...

To introduce examples:

For example, ... Another example is...
As an example,....
Let me give you an example...
For instance...

CONCLUSION

To summarize the points of the report in the conclusion:

To conclude, I have covered the following points. They are...
In conclusion, I have spoken about...
To summarize, I have told you two important points about_____.
 They are....

APPENDIX Q

Sample Videotaped Lecture Script

(All Groups)

THE RIVER THAMES

Do you know what river is the longest and most famous river in the United States? That's right. It's the Mississippi River which is 2,470 miles long. Do you know what the most famous river of England is? Well, today we're going to talk about the River Thames. Notice that it is spelled with a T-H-A, but it's pronounced T-E-Ms. It isn't as long as the Mississippi, but it has a long and interesting history.

First I'll tell you some basic facts about the river, then, how it is used by the people, and finally some of the problems that have evolved around the river.

The Thames River is located in southern England. England is located off the west coast of Europe as you see here on the map. London, the capital, is located here on the river. The river flows across southern England and is 236 miles long.

Now. How is this river useful to the people of England? It is useful in at least three ways. One is that it is useful for industry, the second is that it is useful for tourism and recreation or fun, and the third is that it supplies 75% of the water needed by 12 million people who live by the banks of the river.

The first use, industry, is characterized by boats that move valuable cargo or materials needed by industries such as the car industry. There used to be a ship industry as well which produced famous ships such as the clipper ships.

The second use, tourism, is evident in the number of visitors to ship races and other tourist attractions located on the river. One of the attractions is the famous London's Globe Theatre where Shakespeare held his plays.

Q

THE RIVER THAMES (continued)

The third use of the river is perhaps the most important -- water for the land
and people. The river supplies water for 12 million inhabitants of the river
basin.

Now. The final point about this beautiful river is that there are two problems
that exist. One is the control or flow or how much water is permitted to go
past, and the other is the purity of the water or how clean the water is.

The flow of the river is controlled by a system of weirs or fences designed
to stop or diminish the amount of water that goes by. Only 1400 gallons a day
are allowed to flow to prevent flooding.

The second problem, the purity of the water, is a serious one. While the river
used to be a popular fishing area, it no longer is. Industries along the river
caused pollution of the water. However, after a cleaning project that began
in 1950, the fish are once more appearing. Here is an 11-pound salmon caught
in the river.

So, in summary, the Thames River is located in southern England and is 236 miles
long. It is used for industry, tourism, and as a source of water for 12 million
people. There are two problems with the river. The first is the control of
flow and the second is the purity of the water. To solve these problems, the
English have created a system of weirs to control water flow and a program to
clean the water. Still, the Thames continues to be one of the most beautiful
and interesting rivers of the world.

Q

APPENDIX R

Sample T-List

NAME_____

DATE _____

<u>CAPTAIN COOK</u>

(MAIN IDEAS)	(DETAILS AND EXAMPLES)

R

APPENDIX S

Daily Listening Tests

(All Groups)

Name: _____   Date: _____

RIVER THAMES

1. Which number is closest to the length of the River Thames?

    a. 2 500 miles
    b. 1,000 miles
    c. 500 miles
    (d.) 250 miles

2. The River Thames flows across:

    a. Northern England
    (b.) Southern England
    c. Eastern England
    d. Western England

3. The most important point of the story about the River Thames is

    a. The Thames is one of the most beautiful rivers in the world.
    (b.) The River Thames has many important uses but it also has problems.
    c. The River Thames was polluted by industries.
    d. The River Thames is important for tourism.

4. Industrial pollution on the River Thames was very bad for

    (a.) fishing.
    b. tourism.
    c. shipping
    d. boat races.

5. The most important use of the Thames River is for

    (a.) water for the land and people.
    b. industrial shipping.
    c. recreation and tourism.
    d. fishing for salmon.

6. A system of weirs is used on the Thames to

    a. encourage tourism.
    b. clean the water.
    (c.) control the flow of water
    d. permit shipping.

S

7. Identify each of the following sentences as a main point or a detail
   about the lecture on the River Thames. Mark one answer for each
   sentence by circling the M for "Main Point" or D for "Detail".

   M D a. The Thames is a source of water.   item eliminated
   M D b. The Thames is useful for industry.
   M D c. Clipper ships used to be built on the Thames.

S

Name:_____

Date:_____

PIGS

1. The most important idea of the story on <u>pigs</u> is that

   (a.) Pigs are useful to us in a number of important ways.
   b. Many different foods come from pigs.
   c. Pigs are used in scientific studies.
   d. Pigs can be good pets.

2. Pigs are used in France to hunt for truffles. A <u>Truffle</u> is a

   a. Minor nuisance.
   (b.) Plant that can be eaten.
   c. Lost horse.
   d. French wine.

3. The pig's anatomy is similar to that of man. The most important result of this is that pigs

   a. Can become alcoholics.
   b. Prevent humans from being burned.
   c. Make good pets.
   (d.) Are useful in treating human diseases.

4. Scientists sometimes give pigs vodka to make them drunk. The reason they do this is that they

   a. want to test the effects on the pig's heart.
   (b.) try to find cures for humam alcoholism.
   c. want to see how long it takes a pig to get drunk.
   d. are trying to make the pig's feet pickled.

5. Different food products are <u>processed</u> from pigs. <u>Processed</u> means:

   a. Seen
   b. Given
   (c.) Made
   d. Canned

6. One of the most valuable things scientists do with part of the pig is

   a. help people who cannot breathe.
   b. help people with poor hearing.
   c. help people who cannot drink.
   (d.) help people with bad hearts.

S

7. Identify each of the following sentences as a main point or a detail about the lecture on pigs. Mark one answer for each sentence by circling the M for "Main Point" or the D for "Detail".

M (D) a. Pigs are used to hunt for truffles.

M (D) b. Pig leather helps relieve the pain of burns.

(M) D c. ~~Most of the pig can be used for food.~~ ——— item eliminated

Name: _____   Date: _____

HOUDINI

1. Houdini was best known as a famous escape artist, but he was also

   (a.) an aviator and a movie actor.
   b. a politician and an actor.
   c. a musician and a doctor.
   d. a television actor and a magician.

2. Houdini was a <u>sensation</u> as a magician. This mean that he

   a. Saw how to do tricks.
   (b.) Was very popular to many persons.
   c. Made people disappear.
   d. Sensed the importance of magic.

3. Houdini's most famous magic trick was

   a. to take off a straitjacket.
   b. to hold his breath under water for long periods.
   (c.) to make an elephant disappear.
   d. to use his toes like fingers.

4. To become famous as an escape artist like Houdini, you would have to

   a. make an elephant disappear.
   (b.) exercise and practice daily.
   c. escape from handcuffs.
   d. become a man of mystery.

5. He made quarters disappear and <u>reappear</u>. The word <u>reappear</u> means:

   a. Go away
   (b.) Come back
   c. Change
   d. Get lost

6. He <u>admired</u> Robert Houdin so much that he changed his name to Houdini. The word <u>admired</u> means

   a. watched
   b. believed
   (c.) Liked
   d. Looked at

7. Identify each of the following sentences as a main point or a detail about the lecture on Harry Houdini. Mark one answer for each sentence by circling the M for "Main Point" or D for "Detail".

(M) D a. Houdini was famous for his escape tricks.

M (D) b. Houdini's real name was Erich Weiss.

M (D) c. Houdini escaped from the water torture cell in two minutes.

Name: _____   Date:_____

BILINGUAL EDUCATION

1. You could speak <u>in favor of</u> bilingual education because it

   a. encourages cultural separation.
   b. is practical for all schools.
   c. may help students get better jobs.
   d. maintains your home language.

2. In bilingual education in the United States, students study

   a. English and their own language before studying sciences and math.
   b. Sciences and math in their own language before learning English.
   c. English first and later sciences and math through their own language.
   d. English while at the same time studying sciences and math through their own language.

3. In other countries, what two languages would students use in bilingual education?

   a. the main language of the country and the student's home language.
   b. the main language of the country and English.
   c. the student's home language and English.
   d. the two languages spoken by the student's parents.

4. Bilingual education is more practical for schools when all the students who do not speak English

   a. use different languages.
   b. understand each other's languages.
   c. use the same language at home.
   d. are from different countries.

5. The United States does business with many countries. Because of this, you could say that

   a. bilingual students should only study Business.
   b. bilingual people are needed for communication.
   c. other countries should learn English.
   d. our schools should teach Business in other languages.

6. Which sentence explains <u>best</u> the main idea of the lecture on bilingual education?

   a. Bilingual education is the best way to teach English.
   b. There are arguments for and arguments against bilingual education.
   c. Bilingual education helps students keep up in subject areas.
   d. Bilingual education does not teach English.

7. Identify each of the following sentences as a main point or a detail about the lecture on bilingual education. Mark one answer for each sentence by circling the **M** for "Main Point" or the **D** for "Detail".

   Ⓜ D a. There are three reasons why bilingual education is good.

   M Ⓓ b. The United States does business with many countries.

   M Ⓓ c. Bilingual education is not practical for some schools.

APPENDIX T

Teacher's Script for Instruction

in Speaking Strategies

(Metacognitive Group)

SERIES: Day _3_

ACTIVITY: 2; SPEAKING INSTRUCTION - FUNCTIONAL PLANNING

TIME: 15 minutes

GROUP: METACOGNITIVE

SCRIPT:

Now we come to the speaking activity. In this activity you will learn:

1) how to prepare for an oral presentation

2) and how to work with a friend or family member to help you prepare.

This method of preparation will help you in school, at work, or in situations where you have to speak such as making a school announcement, giving a short oral presentation in class, or summarizing information for a friend.

You will prepare and present a short oral presentation on a familiar topic. (Hand out TOPIC LIST here and have a student select a topic. Then elicit the following)

O.K. If you want to give a short oral presentation, what do you have to do? (Elicit one or two ideas)

O.K. Organize your ideas. How will you organize your ideas? What will you begin with? O.K. The introduction. How do you tell people what the report is about? After the introduction? O.K. Elaboration of the main ideas. And after that? Yes, the conclusion. O.K. Here you have some organization.

Now. What are the main ideas that you want to mention? (Teacher lists on board.) O.K. This is the essential part of the introduction. Now, how do we introduce the subject of the report? (Elicit -- write on board with student suggestions edited to grammatical and appropriate English with no overt correction. T may elicit introductory phrase such as: I will speak on, this paper is about, etc. If Ss have no suggestions-- T goes on to main body.)

O.K. How about the main points or main ideas? How do you want to introduce them? (Elicit-- T writes student suggestions on board.) How about ending the report? (Elicit--write on board-- make sure that Ss know which phrases intro- duce which section by drawing an obvious line between each set of phrases.)

(On board, T should have:)

      INTRODUCTION: Introduce topic of report
                        Summarize main points

      BODY: Introduce 1st point
                        -Example
                        Introduce 2nd point
                        -Example

T

CONCLUSION: Signal end
                     Summarize points

(T hands out list.) Here is a list of markers to use in writing your report.
You can select the marker that you need for each part of report from this list.
Here is a form for writing your report. (T gives examples using marker list,
e.g., to introduce the topic of the report I can say: Today I want to tell you
about... That is what you can write in the first blank. T goes through several
more examples.)

T

APPENDIX U

Worksheet for Speech Preparation

(Metacognitive Group)

INTRODUCTION

Introduce the topic of the report:_____

_____

_____

Summarize the main points of the report:_____

_____

_____

_____

_____

BODY

Introduce the first main point: _____

_____

Give one or two examples:_____

_____

_____

Introduce the second main point: _____

_____

_____

Give one or two examples:_____

_____

_____

__CONCLUSION__: Introduce the conclusion and summary of the report: _____

_____, (then summarize the points that you

talked about)_____

_____

_____

U

APPENDIX V

Teacher's Script for Instruction

in Cooperation in Speaking Activities

(Metacognitive and Cognitive Groups)

SERIES: Day _3_

ACTIVITY: 4; PRACTICE I COOPERATION

TIME: 15 minutes

GROUP: METACOGNITIVE/COGNITIVE

SCRIPT:

Before I assign the groups to practice your reports, I want to give you the
steps to follow for this practice:

1. One person in each group will practice. The other members will help that
    person to produce the best report possible. Each member that is listening
    will be assigned to listen for certain things in the report. (T hands
    out QUESTIONS TO ANSWER.)

2. One person will be assigned to question A and another to question B and
    another to question C. Some will be assigned to two questions to answer
    if there are only 3 people on your team.

3. The person who is practicing the report will read the report once. Then
    the team members will answer the questions that s/he asks. So, team members,
    you must listen for certain things during the first practice of the report.

4. I will collect your reports now and assign the people in each team. (T
    collects reports and assigns groups. Then, addressing each group, each
    person is assigned either to a specific question or to give the report.
    The T hands back the report to the person practicing and indicates to
    team members the questions that they are responsible for. T then circulates
    to see that each team is following instructions.)

APPENDIX W

Speaking Cooperation Handouts

(Metacognitive and Cognitive Groups)

QUESTIONS TO ASK YOUR TEAM

1. Did you understand everything I said? Were there any words that
    were hard to understand? Which ones?

2. Could you hear me? Was I speaking too fast or too slow?
    Was I speaking too softly or too loudly?

3. Was the report organized well?
    Could you follow the ideas easily?